

Report of the Director

Since the appearance of the last Report the Institute has sustained a sad loss in the death of Sir Alfred Clapham, who had been Chairman of the Management Committee since October 1946. The Management Committee has recorded its appreciation of the services of Sir Alfred Clapham in the following terms :—

“ In Sir Alfred Clapham not only did the Institute lose an inspiring and influential Chairman, but the University lost a wise counsellor and a weighty friend. Sir Alfred succeeded Professor Glanville as Chairman of this Committee in October 1946. He had been a member of the Board of Studies in Archaeology since 1930. In both of these capacities he lent to the University the authority of his international distinction as a scholar and of the high offices in the archaeological life of Britain that had accrued to him as a result of his personality and scholarship. He had been Secretary to the Royal Commission on Ancient and Historical Monuments since 1933, President of the Society of Antiquaries of London, 1939–1944, Chairman of Section X of the British Academy, President of the Royal Archaeological Institute, and first Chairman of the Council for British Archaeology, in the creation of which he played a leading part. The Institute of Archaeology in particular has benefited, both from his personal charm and tact and from his experience as an administrator whose achievements were highly esteemed by all his colleagues of the Civil Service.”

Professor Wooldridge was elected its Chairman by the Management Committee in December 1950 in succession to Sir Alfred Clapham.

STAFF

In January 1951 Mr. I. W. Cornwall resigned the post of Secretary to the Institute, having been appointed Demonstrator in the Department of Environmental Archaeology, and Mr. Edward Pyddoke, a former student of the Institute, was appointed in his place.

Mr. Cornwall was appointed in December to the post of Demonstrator in the Department of Environmental Archaeology created by the Management Committee to meet the increasing work in teaching and supervision in this Department.

STUDENTS

Ten new students were registered in 1950 for the Diploma in European Archaeology, Part A, making a total registration at the Institute for this Diploma 15 ; and four students were registered for the Diploma, Part B. In addition there were five students registered for the M.A. and four for the Ph.D. In addition to these students working for University degrees or diplomas, two senior officers of the

REPORT OF THE DIRECTOR

Archaeological Survey of India, Professor Sankalia of Deccan College, Poona, and M. le Breton of the Louvre, have been working at the Institute during part of the past session. Seventeen students have been registered in the Technical Department, including an assistant from the Sarawak Museum and one from the Australian Museum in Sydney.

LECTURES

Two courses of public lectures have been arranged at the Institute in the evenings during the past session. In the Winter Term a course of nine lectures on "Recent Work in European Prehistory" was delivered on Mondays at 6.30 p.m. Three lectures dealt with aspects of the Palaeolithic, while in later periods new discoveries were described in connection with the Aegean, Balkans, Poland, Northern Europe, Gaul and the Appenine Peninsula. The lecturers included Dr. J. S. P. Bradford, Professor V. G. Childe, Dr. J. G. D. Clark, Dr. G. E. Daniel, Professor D. Garrod, Mr. Sinclair Hood, Miss N. Sandars, Professor T. Sulimirski and Professor F. E. Zeuner. Attendance varied from 22 (on an extremely wet night in the middle of November) to 44, the average being 35. In the Summer Term six public lectures on "Ancient Cities in the Light of Archaeological Discovery" were delivered on Wednesdays at 8.15, the cities discussed being Boghazköy, Olynthus, Samaria, Carchemish, Assur and Taxila, and the lecturers Dr. O. R. Gurney, Professor C. M. Robertson, Miss K. Kenyon, Sir Leonard Woolley, Professor M. E. L. Mallowan and Professor R. E. M. Wheeler. Attendance varied from 44 to 92, the average being 62.

The usual courses were supplemented during the session by a course on Practical Technology arranged by Professor Codrington and Mr. Rawson, a course which proved very popular among students and was undoubtedly very beneficial. A highly instructive demonstration of the manufacture and use of stone implements was given by Dr. L. S. B. Leakey on 19 October.

COLLECTIONS

In order to make up a serious back-log in the registration of specimens and cataloguing of collections, Miss J. T. Philips has been appointed on a temporary basis as Register Clerk. Additions to the collections received during the year include the extremely valuable Cotton Collection of Roman coins and medals, presented by Mrs. M. A. Cotton, M.B.E., material from the Kimmeridge shale industry left by the late Dr. Henrietta Davies and presented by her executor, Dr. Dora Colebrook; sherds and stone implements from the prehistoric site of "Early Khartoum," presented by the Antiquities Department of the Sudan Government; pottery, glass and bones from Malta from Commander J. N. Drummond, O.B.E.; fifteen palaeoliths from India from the collection of the late Dr. Eliot Curwen, presented by Dr. E. C. Curwen; sherds from Baluchistan, presented by Col. D. H. Gordon; a type collection of Mesolithic and early Neolithic core and flake axes, classified according to the strati-

REPORT OF THE DIRECTOR

graphic sequence determined by recent excavations, from the National Museum of Denmark, Copenhagen. During the session the Kharga Collection, acquired in the previous session, has been catalogued, and a selection of the most distinctive types has been arranged as a small public exhibit. Another small exhibit arranged was made up of the Mesolithic axes from Denmark mentioned above.

ARCHAEOLOGICAL RESEARCH

During the session the Institute has continued to contribute to the furtherance of archaeological knowledge, not only by the research and excavations undertaken by members of the staff and students (to some of which reference is made in other sections of this Report), and by the advice and assistance given by members of the teaching and technical staff, but also by offering hospitality to excavators. To the latter the use of rooms in the Institute in conjunction with the facilities afforded by the Library, Technical Department, and the Drawing and Photographic Departments, has proved, as was expected by the founders of the Institute, a very valuable contribution to research, as has been demonstrated by glowing letters of appreciation received from the directors concerned. Thus the Wellcome-Marston Expedition to Palestine, which continues to occupy rooms in the Institute, has made the University of London the residual legatee of the valuable collection from Lachish already housed in the Institute, and the acceptance of this bequest by the Court and Senate has made the Institute of Archaeology the repository of the fullest collection of Palestinian antiquities available anywhere outside Jerusalem itself. By a little rearrangement of storage accommodation, space has been made available in the basement where Mr. C. D. P. Nicholson has been able to carry out his patient work on the restoration of what promises to be a unique fresco from the Roman villa at Lullingstone, and the excavators and the archaeological public to whom they have reported have expressed the warmest gratitude for the accommodation thus provided and for the assistance proffered by members of the Institute staff, and in particular by Mr. Cookson, our photographer.

Report of the Department of Environmental Archaeology

TEACHING

In the usual courses of Environmental Archaeology the treatment of the domestication of animals and the cultivation of plants has been expanded and the students are now being given more ample opportunities to do practical work on the collections. Mr. I. W. Cornwall, who has joined the staff of the Department as a full-time member, gave an additional course on osteology for students of the technical

REPORT OF THE DEPARTMENT OF ENVIRONMENTAL ARCHAEOLOGY

side of archaeology and another on the chemical aspects of methods of restoration and preservation.

Teaching on the Lower Palaeolithic of Europe has been improved by making available to the students the French and British specimens presented by the Wellcome Historical Medical Museum, a collection of Baker's Hole Levalloisian and other material. Together with the stratigraphical series of sediments from specimen sites contained in the teaching collection, it is now possible to demonstrate in the classroom the conditions of some of the sites and to illustrate the typological and geological methods of investigation.

The course on the Stone Ages of Africa and Asia has come to stay, and was attended by nine students. Two lectures on microlithic industries of western Asia were very kindly given by Dr. John Waechter. The first year course in environmental archaeology was attended by 14 students, a number difficult to accommodate in the classroom.

The number of higher degree and research students increased to seven in the course of the year, three of these being internal research students under regulation 21 (iii), one M.A. student and three Ph.D. students.

Fifteen lectures were given by members of the staff outside the Institute. Thirty-two members of the London and Middlesex Archaeological Society came to see the Department on 14 October and demonstrations were given of work in the laboratory.

Sixteen days were spent with students in the field, the average attendance being nine. The Palaeolithic sites of Swanscombe and Baker's Hole, the Acheulian raised beaches of the Chichester area, the new Mersea Island locality of the Clacton stage and the Mesolithic site of Abinger were visited. The teaching collections were improved by donations of prehistoric, geological and palaeontological specimens. Our grateful thanks are due to those who helped in this way, particularly Mr. Andrist, Mr. Ashbee, Dr. Curwen, Colonel Gordon and Miss Keef.

RESEARCH

Research facilities were improved by the acquisition of a new set of standard sieves, urgently needed for mechanical analysis, several microscope lamps which make it possible to demonstrate with more than one microscope simultaneously during the courses. Only one of these microscopes is the property of the Department and we are grateful to the owners of three other instruments for lending them to us.

A fluorescence lamp has been bought and is being used in the identification of mineral substances, organic material in soils and many other practical tests, such as the observation of the amount of penetration of preservatives and the identification of faded script on specimens and labels. The lamp is intended to be used for work on the distinction of burnt and unburnt bone from prehistoric sites and similar problems.

REPORT OF THE DEPARTMENT OF ENVIRONMENTAL ARCHAEOLOGY

These have been studied in Sweden and it has been decided to wait until the Swedish publication is out before the work is started in order to avoid unnecessary overlap.

Much attention has been given to the improvement in mechanical analysis. The Atterberg, pipette and hydrometer methods have been compared with each other. On the whole, the pipette method turned out to be the most satisfactory and will in future be used for normal routine work, except where time is pressing. One student has specialised in the use of the hydrometer. It now remains to speed up the preparation of the samples which hitherto has taken several days. As recommended by the British Standards Institution, a mechanical stirrer has been ordered, and its performance will have to be compared with that of the old shaker.

In the palaeontological field, work on the distinction of remains of cattle and bison as well as recognition of sexes in such material has reached an advanced stage. The changes in the composition of the molluscan fauna of the Thames at Chertsey in relation to Neolithic and Iron Age sites has been studied and will be published in the near future.

RESEARCH ON SITES

Apart from sites studied specifically with the intention of securing material for work in the Institute, 15 requests to study samples and identify specimens were complied with during the year. Six hundred and eighty-four samples were examined. Among the materials studied were sections from the Mesolithic site of Abinger, the Bronze Age barrow of Wallis Down, the Palaeolithic caves of Haqfet ed Dabba and Haqfet et Tera in Cyrenaica (excavated by Dr. C. B. McBurney) and the type site of La Gravette. Faunal remains from Caldy Island, Pembrokeshire (Mr. Lacaille's excavation), Lullingstone, Colchester, Verulamium and a Bronze Age cinerary urn from Westbourne near Chichester were studied. In addition, 21 enquiries were received which did not require work in the laboratory, though in some cases the extensive checking of manuscripts and bibliographical work had to be done.

FIELD WORK

At the request of the excavator, Dr. J. Waechter, Goram's Cave, Gibraltar, was visited and field work undertaken in order to determine the age of the contained industries relative to the oscillations of sea-level during the Last Interglacial and Last Glaciation. In connection with this work and at the invitation of the Moroccan authorities, the relevant prehistoric sites on the west coast of Morocco were visited for the purpose of comparison. Thanks are due to the Central Research Fund Committee of the University for a grant-in-aid for this work. The survey of Palaeolithic sections in France and Western Germany was continued and a students' excursion was arranged to visit Western Germany.

SUMMER EXCURSION TO WESTERN GERMANY

The excursion lasted ten days and was attended by seven students. Its primary

purpose was the study of the stratigraphy of Palaeolithic stations in loess deposits. For this purpose, the sites of Wallertheim (Mousterian), Kriegsheim (Mousterian and Aurignacian), Mauer near Heidelberg (the site of the discovery of *Homo heidelbergensis*) and a number of sections showing the tri-partition of the Younger Loess and situated between Wiesbaden and Rüdesheim were visited. One day was spent in studying the influence of recent earth movements on the environment of Palaeolithic man near Bingen and in the Nahe Valley, and another in studying volcanism in relation to prehistory in the Eifel. In this area the famous quarry of Niedermendig lava was visited. In the neighbourhood, the age of the latest eruptions which cover the Magdalenian site of Andernach have been determined as of Alleröd age by means of pollen analysis. The area abounds in remains of the Roman period and the opportunity was seized to visit at least two of the most famous sites in the area, namely the Saalburg and Trier.

The Saalburg is a *Limes* fortification constructed in A.D. 83 and given up in A.D. 260. It has been reconstructed and largely rebuilt, the legionary camp of Lambaesis in North Africa serving as prototype. Trier, the *Augusta Treverorum*, famous for its *Porta Nigra*, *basilica* and other Roman buildings, was an imperial residence, closely associated with Constantius Chlorus and Constantine.

The meeting of the German section of the International Quaternary Association which was being held at the time in Mainz was attended and many useful contacts made. One of the major lectures dealt with prehistoric typology in relation to quaternary stratigraphy and was given by Dr. R. Grahmann, the investigator of the Levalloisian site of Markkleeberg.

The following museums and institutions were visited in order to study specimens and meet members of the staff: Mainz (Römisch-Germanisches Zentralmuseum), Homburg (Saalburg Museum), Wiesbaden (Soil laboratory of the Geological Survey), Heidelberg (University Department of Geology and Palaeontology), Trier (Landesmuseum) and Niedermendig (Archaeological and Geological Museum).

Our sincere thanks are due to the authorities of Mainz University for enabling us to use their students' hostel and guest-room as headquarters, and to our German colleagues who have so kindly acted as guides and advisers, particularly Dr. H. Eiden (Trier), Professor H. Falke (Mainz), Dr. J. Frechen (Bonn), Dr. Gose (Trier), Professor F. Michels (Wiesbaden), Dr. X. Michels (Niedermendig), Dr. P. Pfeffer (Wiesbaden), Professor and Mrs. Plewe (Heidelberg), Professor L. Rüger (Heidelberg), Professor W. Wagner (Darmstadt), Dr. W. Weiler (Worms).

F. E. ZEUNER.

Report of the Technical Department

Full advantage has been taken this year of the facilities offered by the department, over 40 students attending the courses.

REPORT OF THE TECHNICAL DEPARTMENT

Reconstruction work for outside bodies has also been continued throughout the year, though it has become increasingly difficult to complete individual tasks with any speed owing to the amount of time which has to be devoted to teaching. Material from eight major excavations, four museums and 11 individual research workers has been dealt with, including some very fragile carved ivories from Nimrud and a large collection of bronze objects from Canterbury.

Two films have been made in the department during the year, one showing the reconstruction of pottery and the other the treatment of metal. These will be used in teaching and copies will be available for sale or loan in due course.

Miss Cecil Western has joined the department as temporary Instructor during the absence of Miss Starkey on sick leave. During the summer vacation she assisted Miss Kenyon at Sabratha, where she acquired valuable experience in the treatment of objects in the field, especially in testing new methods of strengthening fragile objects in situ by impregnation with plastics before lifting them.

Miss Maitland Howard has completed six more oil paintings in monochrome under the supervision of Professor Zeuner of *Equus przewalskii*, *Equus gmelini* (Tarpan), *Bos primigenius*, *Megaceros euryceros*, *Tichorhinus antiquitatis*, and *Bison priscus* in their natural habitats. Scale models of *Ovibus moschatus* and *Equus gmelini* have also been made, but have not yet been cast in plaster.

To facilitate the impregnation of large objects with plastics, a tank has been installed. In this a partial vacuum is created, the plastic solution then being driven into the object by a return to atmospheric pressure.

IONE GEDYE.

Report of the Photographic Department for the year 1950-51

The year 1950-51 proved a much busier year for the Photographic Department than any previous year, due mainly to a larger variety of tasks and the fact that teaching requirements became pressing and it was necessary to accept students in each Term of the session instead of holding one class only in the Third Term.

Altogether there were 21 students taking the Photographic Course; three were given private tuition in order to fit them for expeditions, nine were diploma students and nine were technical students. Students from Malaya, Australia, U.S.A., Burma and the Gold Coast were included, and the student's dark room was in full use during the long vacation.

Actual production figures have fallen slightly; this was to be expected in view of the many other ways in which the Department was used: the Instructor was called to York to give a course of lectures for the Museums Association; assistance was

REPORT OF THE PHOTOGRAPHIC DEPARTMENT

given to two expeditions to the Near East ; during the year seven archaeological sites were visited, and finally two technical Cine Films were made—one of 850 ft. on the Restoration of Pottery and one of 450 ft. on the Preservation of Metals. Both are intended for immediate use in the coming year's work. A pre-Term showing to overseas Museum Executives aroused keen interest and led to enquiries for copies of each of these films. It is hoped to continue with other items of this series in the coming session.

PRODUCTION

1,406 Lantern Slides.

3,700 Prints and Enlargements.

132 Attendances at lectures with the lantern projector.

NEW EQUIPMENT

A $\frac{1}{2}$ pl. new Model Kodak Specialist Camera with 6 double dark slides and case.

An 8 in. Ektar Anastigmat Lens in shutter.

A 10 in. Ross Homocentric Lens.

A special Dallmeyer Wide Angle Lens.

Two new safelights.

16 mm. re-winder.

Three 800 ft. Paillard-Bolex reels and cans.

M. B. COOKSON.

Library Report

This year has shown an increase in the number of readers working in the Library, averaging seven regular students daily and about 20 outside readers a week. Borrowing for home reading was the highest yet recorded, the increase being three times that of the previous two years.

A Reference and Subject Index desk has been installed with a display case for new accessions on the reverse side.

The Subject Index of the books and pamphlets in the Library has been completed. The Site Index now comprises five volumes covering the books and pamphlets, and a start has been made with a number of journals.

The Lantern Slide collection continued to be revised under Miss Mary Rennie, appointed in September, until she left in June to take up a post in Gloucester Museum. Miss Ilid Anthony was then appointed in her place. As the slide collection is now extensively used within the Institute, new rules have curtailed the service for members. Even so, the outside loans have been maintained.

LIBRARY DEPARTMENT

VOLUMES ADDED TO THE LIBRARY	....	....	....	....	....	273
By Purchase	....	....	....	....	....	146
Presented	....	....	....	....	....	89
Exchanged	....	....	....	....	....	38
PAMPHLETS ADDED TO THE LIBRARY	....	....	....	....	....	123
By Purchase	....	....	....	....	....	9
Presented	....	....	....	....	....	107
Exchanged	....	....	....	....	....	7
PERIODICALS ADDED TO THE LIBRARY	....	....	....	....	....	293
LANTERN SLIDES ADDED TO THE LIBRARY	....	....	....	....	....	1,183
Presented	....	....	....	....	....	364
VOLUMES BOUND	....	....	....	....	....	188
VOLUMES LENT	....	....	....	....	....	2,770
Highest month—February	....	....	....	....	....	357
Lowest month—August	....	....	....	....	....	79
VOLUMES BORROWED FROM OUTSIDE LIBRARIES	....	....	....	....	....	167
LANTERN SLIDES LENT	....	....	....	....	....	1,293

The following have presented books, periodicals and lantern slides to the Library :—

Editors of Antiquity ; W. J. Arkell ; Ashmolean Museum ; Mrs. Bell ; A. F. Bell ; Dr. Böhm ; Dr. V. G. Childe ; *CIBA Review* ; I. W. Cornwall ; Mrs. Cotton ; Executors of the late Dr. Henrietta F. Davies ; Comdr. J. H. Drummond, R.N. ; Miss M. Eates ; Dr. Henry Field ; Dr. Frankfort ; Dr. H. Godwin ; Goldsmiths' Librarian ; L. V. Grinsell ; Executors of the late Hon. Mrs. Horsfield ; Mrs. Maxwell Hyslop ; Mr. Kavanagh ; Sir Thomas Kendrick ; Dr. K. M. Kenyon ; Group Capt. Livock ; A. W. G. Lowther ; Mrs. Mackay ; Miss D. Marshall ; Lt.-Col. Meates ; Metropolitan Museum of Art, New York ; J. Moore ; Dr. H. L. Movius ; C. D. P. Nicholson ; Miss F. M. Patchett ; Dr. K. P. Oakley ; E. Platakis ; University of Pennsylvania Museum ; E. Pyddoke ; Royal Archaeological Institute ; W. A. Seaby ; Sir Lindsay Scott ; Dr. Senyürek ; School of Oriental and African Studies ; P. L. Shinnie ; Society of Antiquaries of Scotland ; J. R. Stewart ; Miss G. Stretton ; Dr. Sulimirski ; R. Summers ; Surrey Archaeological Society ; Miss J. du Plat Taylor ; Dr. J. Waechter ; Mrs. Walton ; Trustees of the late Sir Henry Wellcome ; Miss C. Western ; Dr. R. E. M. Wheeler ; G. S. Wood ; Sir Leonard Woolley ; Zinc Development Association.

The Excavation of Jabrud and its Relation to the Prehistory of Palestine and Syria

BY J. D'A. WAECHTER

I

The publication of Dr. Rust's excavations at Jabrud near Damascus^{(1)*} has added greatly to our knowledge of the prehistory of Palestine and Syria, particularly as the three caves excavated cover in all a very wide range of time, a range similar to that of the Mount Carmel sequence.

The value of this material can best be appreciated if compared with previous results obtained from this area, and a brief summary is necessary before we examine Rust's findings in detail.

Broadly speaking, Palestine, Syria and Transjordan, at least west of the Hedjaz railway, can be considered as representing one unit with roughly similar terrain. To the east and south of Syria lies the great desert, part of which extends into Transjordan, and the whole stretches southwards into the Arabian peninsula. Due east is the great valley of the Tigris and Euphrates; to the west the sea, and on the south-west the Sinai desert.

Our detailed knowledge of the prehistory of Palestine and Syria is of comparatively recent date. In Palestine the work of Professor Garrod, M. René Neuville, and Turville-Petre and in Syria that of Zumoffen and more recently Haller, Doherty and Ewing have given us a more or less complete sequence ranging from the Tayacian to the end of the Mesolithic.

Before analysing the cave sites in detail we must first consider the periods which precede the earliest cave deposits, but, as these do not occur at Jabrud, only brief mention will be made of them. Both Passemard⁽²⁾ and Stekelis⁽³⁾ claim the presence of Abbevillian, Passemard from a wadi north of Beyrouth and Stekelis from Ba'qa, a suburb of Jerusalem. Since the major difference between the Abbevillian and the early Acheulian is technique, a hammer stone being used in the former and the wood technique in the latter, and the earlier method sometimes continues after the introduction of the later, a fairly large series is required before either stage can be established with any certainty. In Passemard's gravels there is far too little material to make a classification certain, and in the case of the Ba'qa implements the material is very intractable, though Leakey's work at Olduvai⁽⁴⁾ clearly shows that the quality and finish of hand axes is not so much affected by material as might be supposed. The early Acheulian is at present known only from one site, Jisr el Binat Jakub near Lake Huleh⁽⁵⁾; the results are not

* For notes see page 27

fully published, but from Stekelis' preliminary reports it appears that early Acheulian hand-axes of basalt were found associated with *Elephas ? trogontherii*.

The earliest material from the caves is the Tayacian from Tabun level G⁽⁶⁾ and the base of Umm Qatafa, south of Bethlehem.⁽⁷⁾ This is a very rough industry consisting largely of utilised flakes ; it is known from La Micoque in the Dordogne⁽⁸⁾ where it occupies the same stratigraphical position as in Palestine. Neuville maintains that at Qatafa the Tayacian levels G and F-F₂-E₃ are earlier than Tabun and refers to them as Tayacian I and II and classifies Tabun G as Tayacian III.⁽⁷⁾ The Acheulian from the caves which follows the Tayacian is rather advanced typologically and is generally referred to as Upper Acheulian, and this is followed at Tabun and Umm Qatafa by a further stage, the Micoquian.

The main feature of the cave Acheulian of this area is the abundance of flake tools which accompany the typical hand axes ; it must be remembered of course that the presence of flake tools is normal in Acheulian sites elsewhere as Harper-Kelly has shown in some of the French sites.⁽⁹⁾ In Palestine these flake tools are well made and in considerable quantity ; in addition to the *racloirs* which are very characteristic, there is a group of implements which bear a strong resemblance to industries of Upper Palaeolithic type—Audi and Chatelperron points, gravers, including angle, *bec de flûte* and polyhedric, these later types being particularly marked in a zone between Ea and Eb of Tabun, but also occurring elsewhere in the Micoquian levels of this site as well as at Umm Qatafa. The majority of the flakes of the Upper Acheulian and the Micoquian at Tabun have plain striking platforms, but occasionally the faceted variety occurs, though generally rather rough.

In the Micoquian layers of Tabun there are in addition flakes of definite Levalloiso-Mousterian type. Other sites in the area have produced hand axes comparable to Tabun and Umm Qatafa, for example Mugharet Zuttiyeh⁽¹⁰⁾ and Adlun,⁽¹¹⁾ and there is a large collection of hand axes of upper Acheulian type from the Wadi Gaza and its tributaries, one of which yielded Acheulian hand axes from a layer underlying a Levalloiso-Mousterian with cordiform types.

The Micoquian from Tabun E is characterised by smaller hand axes, a tendency towards triangular forms and, as already mentioned, a more marked tendency towards blades and gravers than in the preceding level. Neuville classifies the three hand axe levels from Umm Qatafa as Middle, Upper and Final Acheulian, but, as there is such a marked similarity between the material from the two sites, the term Middle Acheulian is perhaps better dropped. At Zuttiyeh the hand axes appear to belong to the same stages as at Tabun, and the presence of Levallois elements is possibly due to mixture.

Flake industries have been found on many sites in Palestine and Syria, but only those found under scientific conditions will be considered. Mention has already been made of the Tayacian from Tabun and Umm Qatafa, but the flake industries succeeding the Acheulian must be considered in detail. Attention has been drawn to the presence

of flake tools associated with the Acheulian from the caves, but following these there are distinctive industries which have been termed Levalloiso-Mousterian.

No true Levallois as a separate industry has been found either in Palestine or Syria with any certainty, nor is there as yet any material which could be considered as Clactonian in the sense that this term is used in Europe. Neuville⁽¹²⁾ calls the early levels of Eq el Ahmar and Qafzeh Levallois and at the latter site divides it into lower (L—J), Middle (I), and Upper (H & G). Level F at Qafzeh he calls Mousterian. As the Qafzeh material is not yet published the difference between the Mousterian of Qafzeh F and the Upper Levallois of Qafzeh G is not clear. At other sites, for example Umm Naqous, Tabun and Abu Sif he uses the term Mousterian and correlates this to the Upper Levalloiso-Mousterian of Tabun, that is to say later than "the Great Faunal Break." His one exception to this is the Mousterian from Abu Sif C which he puts as occurring before the break and contemporary with the "Levalloise Supérieur" of Qafzeh G.

In the Mount Carmel caves the Micoquian is followed by two stages of Levalloise-Mousterian. The term Levalloiso-Mousterian which Professor Garrod has employed for the Mount Carmel material clearly defines the character of this industry. Many of the points and side-scrapers are what would be expected in the Mousterian of Europe, but in addition there are distinct Levallois elements, for example, typical tortoise cores with multi-directional preparation of the upper surface, and broad flakes showing evidence of this core technique. A large proportion of cores, however, are single directional and yielded triangular flakes sometimes broad and often very narrow. Gravers are present, mainly simple types but also angle and polyhedric. There was no true blade element at Tabun, but some of the flakes are tending towards them. Hand axes were found at Tabun, Skhul, Shukbah, in the Wadi Nakabyah, and apparently at Abu Sif. As these hand axes are all types which occurred in the Acheulian, it is difficult to decide whether the Levalloiso-Mousterian people made their own or collected those of their predecessors. In Syria the Levalloiso-Mousterian has been found in several sites, it occurs at the base of Ksâr 'Akil,⁽¹³⁾ at Cheka⁽¹⁴⁾ and above the 8 metre beach at Ras Beyrouth.⁽¹⁵⁾ In the Carmel sequence it was possible to divide this industry into two phases, a lower and an upper. This is partly on account of the different proportions of the points to the racloirs and also because of difference in the associated fauna. The earlier stage at Mt. Carmel contained a fauna which included Rhinoceros, Wart-Hog and Hippopotamus, none of which continued into the later stage, and therefore there is a marked faunal change between the two. Unless the material from any site is extensive, it is not always possible to distinguish the two stages on typology alone, but using both criteria the construction of the following table is possible :—

Lower Levalloiso-Mousterian

Tabun C and D.

Skhul B and C.

Jebel Qafseh G to I?

Upper Levalloiso-Mousterian

Shukba D.

Ksâr 'Akil—15 to 16.

Jebel Qafseh F?

Chekka.

Again using the Mt. Carmel sequence as a type section, the industry immediately following the Levalloiso-Mousterian at el-Wad now appears to represent a transitional period between the flake industries and the blade industries which follow. During the excavation of level F the apparent mixture of Levalloiso-Mousterian elements suggested that the level was disturbed, particularly as the implements showed marked signs of rolling. As a result the level was divided typologically into two, F₁ and F₂. Since the publication of the Mt. Carmel material, Haller published his results from the excavations at Abu Halka where he found an industry with exactly the same dual character but with no suggestion that the level was in any way disturbed. It would thus appear that this is an industry which contains elements of two distinct cultures. This double element has been stressed by Miss Garrod in a lecture to the Institute in 1950; she is publishing an extensive study of the industry shortly and it will only be dealt with briefly here.



Fig. 1. Emireh points. 1/2. After Garrod and Neuville

The original material from el-Wad level F1 was called Lower Aurignacian ; end-scrapers were plentiful, the graver types included angle and polyhedral, the last of which was the most plentiful. Of the fourteen points seven were of Chatelperron type, and there were two points of a rather special form. These were made on triangular flakes with no marginal retouch, but the thickness of the bulbar end was reduced by inverse retouch (Fig. 1). This point has been called the Emireh point by Professor Garrod, as it was first found at this site. Neuville found the same point at Taban, and it is referred to by him originally as a *Pointe de Tabelbalat* since a similar point was found at this site in North Africa, and it occurs at other sites in Africa but with different archaeological associations. At Taban Neuville appears in 1934 to have made the same typological division as Miss Garrod at el-Wad, since his level C covered both "Moustérien Moyen" and the Aurignacian with the *Pointe de Tabelbalat*;⁽¹³⁾ this view he has since changed⁽¹⁶⁾. (This may also be true at Emireh where the level concerned was for many years considered as mixed.) He also found the same points at Qafzeh E, and classifies Qafzeh, Taban and el-Wad F as the first phase of his six-fold division of the Upper Palaeolithic and suggests that there is no relationship between it and the Upper Levalloiso-Mousterian.

The section at Ksâr 'Akil⁽¹³⁾ shows two industries between the Upper Levalloiso-Mousterian and the Middle Aurignacian. The first of these is called Transitional and the second Chatelperronian. The former suggests that there is here a similar industry to that from el-Wad F, Taban C, Emireh and Abu Halka. Chatelperron points occur in the Middle Aurignacian at el-Wad, so that it is difficult at this stage to see whether the Chatelperronian level at Ksâr 'Akil is separate or part of the Aurignacian complex, but at Qafzeh D and Erq el-Ahmar F Neuville claims the presence of an industry which has neither the Emireh point nor the characteristic points of the Aurignacian from el-Wad⁽¹⁶⁾ (his stage II).

The Aurignacian from el-Wad is a rich and highly developed industry. In addition to end-scrapers, graters and points, the characteristic feature is the large number of steep scrapers which form a very high proportion of the whole. At el-Wad there were three layers, E, D₂ and D₁, and although they are in the main very similar, they differ slightly in detail. The earliest layer E is characterised by long spiky points, similar, as Professor Garrod has pointed out, to those from the Aurignacian from Krems and Font Yves;⁽¹⁷⁾ Chatelperron points occur but they are uncommon. In D₁ and D₂ the main part of the industry is very similar, but in D₂ the number of Font Yves points is very much reduced and the characteristic point is leaf-shaped with flat marginal retouch. In D₁ the implements are rather better made and the proportion of nose-scrapers is higher.

In el-Wad C was an industry broadly similar to the preceding Aurignacian, but the number of polyhedral graters and steep-scrapers has greatly increased. There is also a tendency to return to more archaic forms, points of both Audi and Chatelperron

type occurring ; there are also small blades with blunting retouch on one edge or both. The Atlitian as it has been called, although later than and differing slightly from the Aurignacian, in no way suggests any tendency towards what may be called a Gravettian as represented in western Europe. Three Aurignacian levels were found by Turville-Petre at Kebareh, but the existing publication of this site only covers the later levels. Following the Atlitian there seems to be a hiatus, the succeeding industries appearing to have little typological connection with the earlier. At Kebareh level C, overlying the Aurignacian, was an industry of rather special character ; the larger implements such as the scrapers and gravers do not differ materially from the Aurignacian, but the points are very small and spiky with fine retouch up the back, some pointed at both ends and some with one end truncated and the other end retouched. There is a slight tendency towards geometric implements, but it is not marked at Kebareh ; there were no micro-burins and no bone industry. The stratigraphical position of this industry is quite clear, as it lies between the Aurignacian and the Natufian.

At Kafr Vitkin⁽¹⁹⁾ Stekelis found an industry which bore some resemblance to Kebareh, and later he found further sites in the same area. Kafr Vitkin appears to be typologically later than Kebareh as the geometric element is much more marked. Haller also found material of this type in a road cutting at Ash-Ash near Tripoli, and there is a collection of similar material in the University of St. Joseph from the sand dunes near Beiruth. There is also little doubt that Neuville's Upper Paleolithic VI from el-Khiam and the upper layers of Ksâr 'Akil belong to this stage. Not all of this material is identical, some being more geometric than others and in some cases the points are wider and squarer, but on the whole it seems fairly clear that those industries are the same but with local variation.

Following the industries of "Kebarehan" type is the Natufian, though this relationship has only been found in two sites, Kebareh and el-Khiam. The break in the sequence which was seen between the Aurignacian and the "Kebarehan" appears to be repeated between the "Kebarehan" and the Natufian. So well known is this latter industry that a detailed description of it is unnecessary. But the main features are the presence of sickle-blades, bone sickle-hafts and extensive carving in bone. The flint industry is markedly geometric with abundant lunates ; triangles, however, are uncommon and trapezoids do not occur. Professor Garrod divided the two Natufian levels from el-Wad into Lower and Upper Natufian, and attributed that from Shukbah to the later stage, while the material from Kebareh belongs to the earlier. Based on his work in south Palestine, particularly at el-Khiam, Neuville has suggested that there are in fact four recognisable stages in this industry, the last two being el-Khiam levels D and C. Taking the Natufian as a whole, however, it does not seem possible to make so detailed a sub-division, but at least three stages seem to be indicated : (1) with a rich bone industry, art, the abundance of implements with Helwan retouch and the absence of micro-burins ; (2) the disappearance of the art and the reduction of the bone industry and the diminishing use of the Helwan retouch and

the appearance of the micro-burin ; (3) the appearance of small notched arrowheads.

The junction of the Natufian and the early Neolithic of the tells is not easy to establish, but the original scheme of Neuville no longer seems valid, as his Tahunian contains elements which we now know to belong to the Chalcolithic of Jericho.⁽²⁰⁾

In Transjordan the industries following the Levalloiso-Mousterian are by no means clearly understood. Field's reconnaissance in 1927 indicated the presence in the desert, of an Upper Palaeolithic suggesting the Aurignacian of el-Wad, and at Wadi Dhobai⁽²¹⁾ was an industry with spiky points which is clearly related to Level C of Kebareh. Rhotert found a considerable quantity of implements in the Jebel Tubaik on the borders of Saudi Arabia ;⁽²²⁾ some of the material is possibly Acheulian, some Levalloiso-Mousterian, and there are later industries whose exact position in the sequence is uncertain ; this is particularly true of the curious bi-facial industry called Kilwan and the similar material from the Dhobai district. In the Jebel Tubaik region there is an extensive series of rock-engravings which Rhotert has published, but so far no satisfactory dating has been assigned to them.

Looking to the east of Palestine-Syria we find that our knowledge of this area is very scanty. In northern Iraq Professor Garrod excavated two caves, Hazr Merd and Zarzi.⁽²³⁾ In the former site there was a Levalloiso-Mousterian very similar to the later stage from Mt. Carmel. At Zarzi she found an Upper Palaeolithic which appears to be connected with South Russia rather than with Palestine-Syria. The main features of this industry are shouldered points, small strangulated blades and, towards the top, a tendency towards geometric microliths. The nearest material similar to this, as Professor Garrod has pointed out,⁽²⁴⁾ is that from Kostienki I and Gagarino, but the similarity of the upper part of Zarzi to the post-Aurignacian of Palestine-Syria and to Gvardzhilas Klde in Transcaucasia⁽²⁵⁾ is marked.

Professor Coon's excavations at Bisitun, between Kermanshah and Hamadan, and the Belt Cave near the Caspian⁽²⁶⁾ produced a late Levalloiso-Mousterian from the former and a Mesolithic with small points with protuberance on the back, from the latter.

II

Rust's three caves at Jabrud are in some respects similar to those of Mt. Carmel and appear to cover much the same range of time. At first sight Rust's sequence seems to be rather complicated and to bear little relation to the rest of the Near East. This is partly due to Rust's terminology and partly to his extensive sub-division of the stratigraphy. To make these results a little clearer we will examine each cave in detail, starting with Cave I, the earliest in the sequence.

The deposit of Cave I is a little over 11 metres in depth and is divided into 25 archaeological layers, none of which reached 50 cms. in thickness. Tabun reached a total depth of 12.70 and was divided into ten layers, one of which, E, was subdivided into four. Rust's levels for Cave I (numbered from the top down) are, from the

bottom upwards, as follows : Jabrudien (25) (22) (21) (20) (16) ; Acheuléo-Jabrudien (24) (19) ; Sp. Mittelacheuléen (23) ; Micoquien (18) ; Jungacheuléen (17) ; Prä-Aurignacien (15) (13) ; Jüng. Jabrudien (14) ; Endacheuléen (Prä-moustérien) (12) ; Acheuléo-Jabrudien (11) ; Ält. Acheuléo-Moustérien (10) ; Moustério-Prä-Aurignacien (9) ; Ält. Jabrudio-Moustérien (8) ; Prä-Mikro-Moustérien (7) ; Ält. Levallois- or Acheuléo-Moustérien (6) ; Mikro-Moustérien (5) ; Jüng. Ach.-Moustérien (4) (3) ; Jüng. Jabrudio-Moustérien (2) ; Jungmoustérien (1).

Such a terminology appears at first to be a little bewildering, but using Mt. Carmel as a check sequence the difference between the two sites is not so marked as might appear. The first of Rust's terms which is foreign to the Mt. Carmel sequence is the Jabrudien. This occurs frequently through the section, either alone or in association with some form of Acheulian. The Jabrudien is a flake industry with *racloirs* ; the working edge varies in relation to the position of the bulb of percussion and the striking platforms are plain. This industry is in fact identical with the flake element of the Acheulian from Tabun ; the difference between the Jabrudien and the Acheuléo-Jabrudien is the addition of hand-axes in the latter. In effect the Jabrudien represents an Acheulian without hand-axes. Once this is understood, a direct comparison can be made to Tabun F and Umm Qatafa. If reference is made to Figs. 2-3 here, this similarity is at once apparent. So prominent are the hand-axes in the Acheulian of Tabun that it is a little difficult to grasp the idea of the possibility of having an Acheulian in which they play practically no part ; this is undoubtedly the case in Jabrud, in fact, even in the levels where hand-axes do occur, their quantity is very small. In view of this the levels 25-16 represent in reality the same range as the Acheulian from Tabun F and Umm Qatafa E2 to D2. Rust lays no claim to there being Tayacian at Jabrud, but the similarity of some of the material from level 25 (Rust, Plates 14 and 15) to that from the bottom of Tabun and Umm Qatafa is very marked, and it seems that level 25 may be Tayacian in part.

Comparing the Cave I Acheulian with Tabun and Umm Qatafa on the basis of hand-axes alone is not easy, as the range of form at Jabrud is rather limited and the standard of workmanship is not very high ; the beautiful oval forms from Tabun are absent, and the pear shape seems to be the characteristic type from Jabrud. On typological grounds the Jabrud material might appear to be a little earlier than that of Tabun, but in default of a clearly understood Acheulian sequence in Palestine-Syria such an assumption is not possible, nor is it wise in view of the general roughness of the Jabrud material. The flake tools from the same levels (25-16) are rather better made and the comparison with Tabun easier ; the same forms occur in both sites ; noticeable, too, is the presence of rough preparation of platforms at Jabrud as at Tabun, and points which are common to both sites. It will be noticed that in Rust's sequence layer 18 is referred to as Micoquien. In Tabun the comparison between F and the E series was possible owing to the large number of hand-axes available, but this is not

the case at Jabrud. Rust's Micoquien (layer 18) lacks, as we have said, the characteristic hand-axes of et-Tabun and Umm Qatafa, but the layer below (19) has types which are more in keeping with Tabun E than those from layer 18. It seems clear therefore that it will not be possible to establish junction between the Upper Acheulian and the



Fig. 2. Flints from Layer 25, Shelter 1, Jabrud. 1/2. (After Rust.)

Micoquien with any certainty. Layers 15 and 13, described by Rust as Prä-Aurignacien, are separated by the Jüng, Jabrudien of layer 14 and followed by the Endacheuléen (Prä-Mousterien). This Prä-Aurignacien consists of blades, end-scrapers and a few steep-scrapers and gravers. We have already seen a somewhat similar facies to this in the E series at Tabun and in D1 at Umm Qatafa. What this amounts to in effect,

is a claim by Rust to have found this blade complex without the associated hand-axes and *racloirs*. In view of the shallowness of Rust's layers this does not seem to be fully substantiated. As we have already said, it is not possible to establish clearly on hand-axes alone an Acheulian-Micoquien junction, but it seems fairly clear that

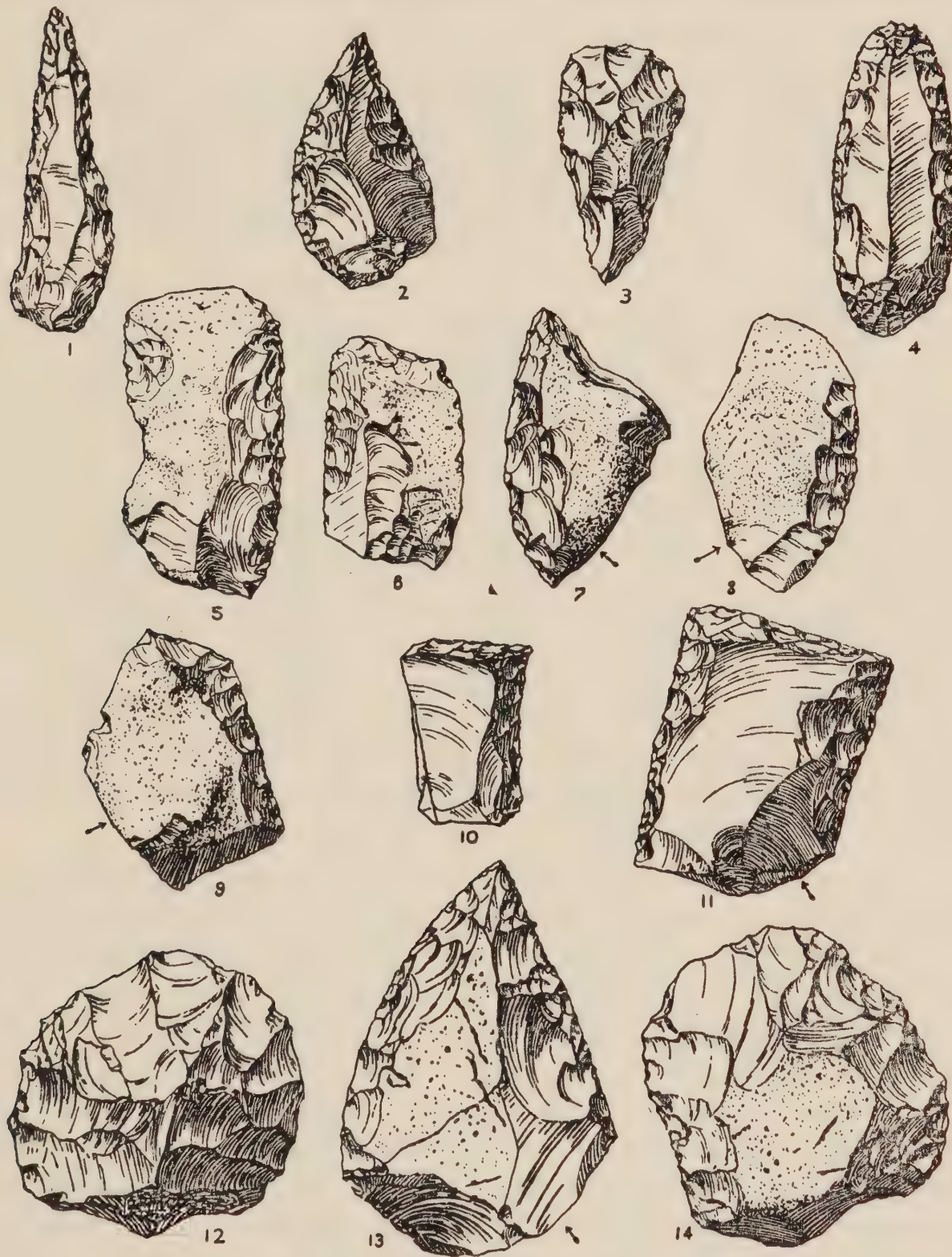


Fig. 3. Implements from et-Tabun, Layer Ed, Upper Acheulian (Micoquian). 1/2. (After Garrod.)

the Prä-Aurignacien should be related to Ea—Eb of Tabun, particularly as Rust illustrates what are obviously broken hand-axes in layer 15 (Plate 34) as well as *racloirs* (Plate 36). Layers 12 and 11, since they contain hand-axes and typical *racloirs*, should also be equated with Tabun E.

The presence of hand-axes in the Levalloiso-Mousterian of Palestine and also of a faceted platform technique in the Acheulian make it rather difficult to establish the junction between the two at Jabrud, but the disappearance of the typical Acheulian *racloirs* by layer 10 suggest that this layer marks the beginning of the Levalloiso-Mousterian complex. Layers 10-1 occupy a little over 2 ms., and, as a result, some of the sub-divisions seem a little unreal, but it must be remembered that any attempt to force the Jabrud Levalloiso-Mousterian into that of Palestine is unwise as there is no reason to say that Jabrud has no local variations of its own. To make a two-fold division into Lower and Upper, as in Palestine, is not possible since we have no assistance from the fauna and the proportion of points remains consistently high throughout. The majority of this material fits in with that of Palestine, including Rust's "*Moustério-Prä-Aurignacien*" with its blade-and-burin elements which occurred at Tabun and also to some extent at Shukbah. One thing which seems to be characteristic of Jabrud is the Mikro-Moustérien (Fig. 4); here the implements are extremely small though Levalloiso-Mousterian in character: from layer 4 on they are of more normal size. The significance of this reduction of size is not clear, and it seems to be a facies peculiar to this site. Shortage of material is obviously not the reason as the material from above and below indicates. Hand-axes occur in layers 10, 8 and 2; those from the lower two layers are small and rather shapeless, and there are only two broken ends from layer 2. Layer 1 is called "*Jung-Moustérien*," but the layer is very thin and the industry seems to have no special character so it is hardly justifiable at present to separate it from the others. The publication of Ksâr 'Akil and the further exploration of Iraq and Iran will probably throw further light on the late Levalloiso-Mousterian of Jabrud.

Cave II, according to Rust, continues the sequence from the Endmousterian through the Aurignacien; the depth of the deposit is a little over 3 metres and is divided into ten layers as follows: Endmoustérien (10-8), Älteres Aurignacien, (7) Älteres Aurignacien (Primitiv-Aurignacien?) (6), Mittelaurignacien (5) (4), Jungaurignacien (3), Jungaurignacien (Atlitien?) (2) and Endaurignacien (Mikro-Aurignacien) (1).

We have already drawn attention to Prof. Garrod's views on the industry with mixed elements that precedes the Middle Aurignacien elsewhere, and it is of considerable importance to see whether, in view of the similarity of the stratigraphy to el-Wad, it occurs at Jabrud. In Rust's sequence as it stands the Endmousterien and the Älteres Aurignacien are considered as being two separate industries, but they have some elements in common. The Jung-Moustérien from layers 10-8 is perfectly straightforward Levalloiso-Mousterian, similar to that from the later stage of Palestine-Syria.

JABRUD

In the Älteres Aurignacien the characteristic implement is the end-scraper; these end-scrapers are on the whole well made and immediately recall those from level F of el-Wad in which they played quite a prominent part. The rest of the Älteres Aurignacien is rather featureless; blades of Chatelperron type occur; there are no polyhedric gravers from layer 7 and only two from layer 6. Not only does this Jabrud Älteres Aurignacien bear a strong resemblance to F 1 at el-Wad but the double element



Fig. 4. Micro-Mousterian implements from Jabrud, Shelter 1, Layer 5. 1/2. (After Rust.)

to which Prof. Garrod has drawn attention is also present at Jabrud, where the earlier forms are clearly shown in Rust's plates 79-82. The major difference between Jabrud and the other sites is the absence of the Emireh point which was so characteristic of this industry in Palestine. This is surprising as this implement occurs at Cheka, and cannot therefore be considered as confined to Palestine.

The Mittelaurignacien of layers 5 and 4 is perfectly in keeping with the Middle Aurignacian of el-Wad E (compare Figs. 5 and 6). Steep scrapers of Middle Aurignacian type are present in both layers as well as points reminiscent of the Font Yves points from el-Wad, but at Jabrud they are not so delicate; Chatelperron points also occur. The total number of implements from these layers at Jabrud is very small



Fig. 5. Aurignacian implements from Layer 3, Rock-shelter 2, Jabrud. 1/2. (After Rust.)

compared with el-Wad, and it is not possible to make a satisfactory comparison of the proportions, but generally they are much the same. Layers 3 and 2, Rust's Jungaurignacien, has features in common with el-Wad D 2, for example Font Yves points and the leaf-shaped blades with flat marginal retouch; nose-scrapers occur at

JABRUD

Jabrud, but they are not very characteristic. Rust has suggested that layer 2 may be Atlitian, but there seems to be little justification for separating it from layer 3 as the high proportion of steep scrapers and polyhedric gravers does not occur at Jabrud.



Fig. 6. Implements from the Mugharet el-Wad, Layer D2, Middle Aurignacian. 1/2.
(After Garrod.)

The top level, layer 1, is described as Endaurignacien (Mikro-Aurignacien) but in most caves in the Middle East the top layer is usually very unreliable; the presence of points of Font Yves type, however, suggests that any Aurignacian elements that there are should be attributed to the layer below.

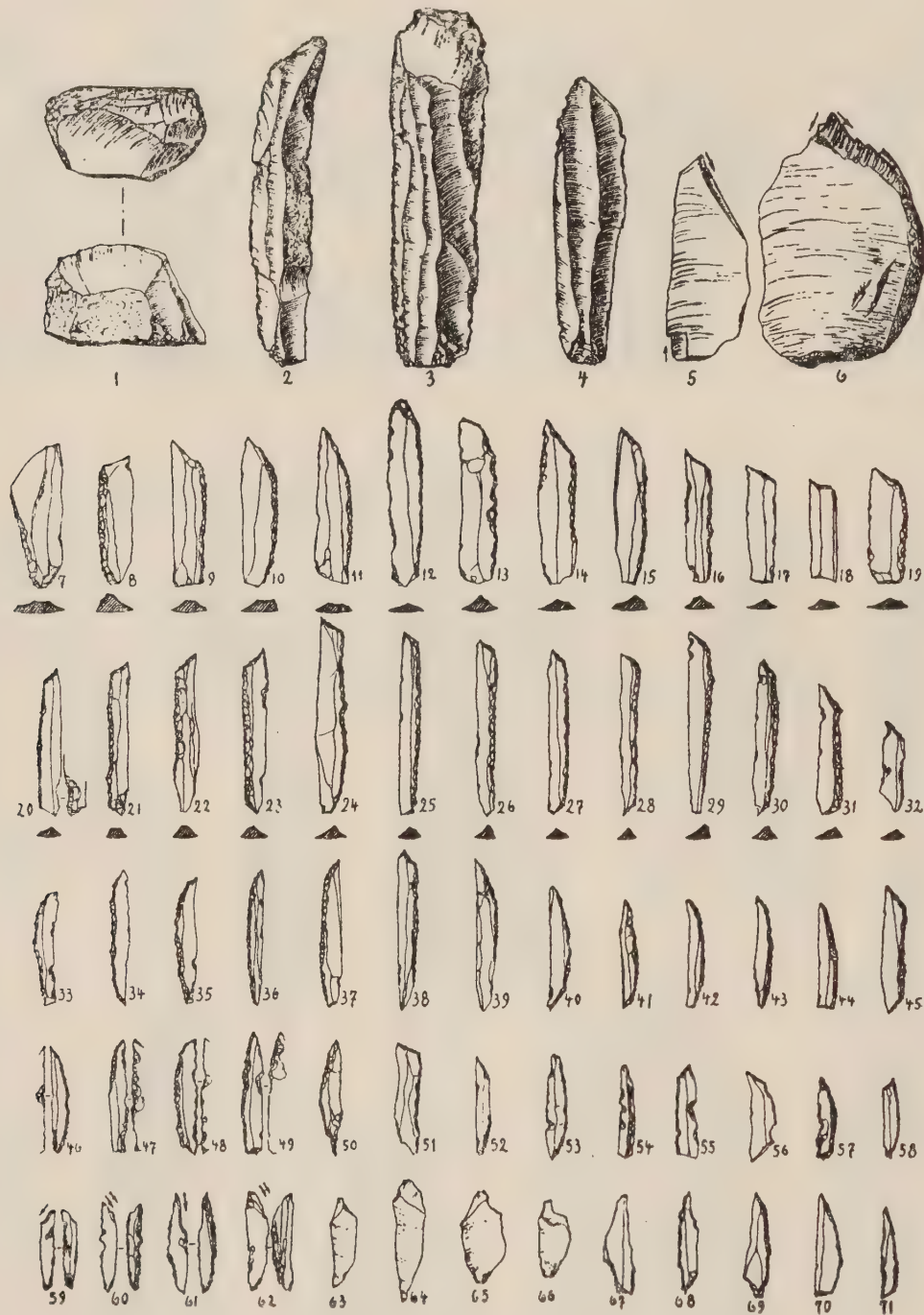


Fig. 7. Nebekian implements from Layer 7, Shelter 3, at Jabrud. 1/2. (After Rust.)

Cave III continues, according to Rust, the sequence from the Jungaurignacien to the Neolithic. The deposit is a little under 3 metres thick and is divided into ten archaeological layers as follows: Jungaurignacien (10-9), Skiftien (8), Nebekien (7-6), Spät-Capsien (5), Nebekien (4), Faletien (3), Älteres Natufien (2) and Neolithi-

kum (?) (I). The term Jungaurignacien we have already had before in Cave II. In Cave III the first Jungaurignacien layer is very thin and from it, and layer 9, there were only 163 flints in all. From this small quantity not very much can be deduced,



Fig. 8. Flint implements from Level C, Mugharet el-Kebarah. 1/2. (After Turville-Petre.)

but none of it would be out of place in the Middle Aurignacian from Cave II which we have already discussed.

Layers 8 to 3 inclusive in Rust's sequence contain four terms with which we are not familiar ; this implies that Rust has found industries which cannot be equated with those already known in Palestine-Syria or elsewhere. A close examination of the material from layers 8 to 3 shows that although there are some peculiarities, Jabrud does not differ as profoundly as the new terminology suggests. The tendency towards small spiky points has already been observed from Kebareh. In Jabrud, however, there seems to be two phases which are as yet confined to this site : one is the Skiftien of layer 8, and the other the Faletien from layer 3. The part of the Skiftien that Rust illustrates on plate 99 is very similar to the Aurignacian below, but the other half, plate 100, has blades of a type which have not occurred before. These are parallel sided, retouched sometimes across one and sometimes across both ends ; there are in addition curved blades of Aurignacian type.

Following the Skiftien are the first two layers of the Nebekien (7 and 6). Here we are dealing with an industry which has definite affinities to the "Kebarehan" as comparison with Kebareh level C clearly shows (Figs. 7 and 8). This brings the Jabrud Nebekien in line with the other Kebarehan sites in Palestine-Syria.

There seems to be no very good reason for separating the Spät-Capsien from the Nebekien of layers 6 and 4, the only implement which does not occur in the Nebekien is the small point with marked protuberance on the back. The Nebekien from layer 4 differs from the two below in having "proto" lunates, but in this respect only.

The Faletien from layer 3 differs quite considerably, though part of the industry seems to have affinities to the layers below. Rust illustrates this material on two plates, 105 and 106 ; in the latter the points are very much bigger than in the Nebekien and the "spiky" appearance has definitely disappeared. In addition to these larger points there are very squat blades, some almost square, and retouched on three sides ; others are retouched across one end only. In plate 105 there are long pointed backed blades which are almost Gravettian in type.

Taking layers 8 to 3 as a whole the similarity of layers 7 to 4 to the other sites of Kebarehan type is obvious, though at Jabrud the micro-burin is present in all four levels. In the six layers 8 to 3 the picture shows, if the continuity is considered as unbroken, a rather marked break-away from the Aurignacian by the appearance of squared blades. This is followed by a reduction in the size of the points through layers 7 to 4 and later a return to larger implements in layer 3. If the square and pointed blades of the Faletien belong together, then the connection of the Faletien and the Nebekien seems possible, as the squared blades appear to have their roots in the earlier industry. Squared blades of similar type have been found in a Kebarehan complex in the sand dunes near Beirut and elsewhere.

Although the similarity of Jabrud to the other Kebarehan levels seems clearly established, it gets no nearer to the problem of the origins of these industries. It must be remembered, however, that the larger implements from the upper layers of Cave III, such as the scrapers and gravers, are very similar to the Middle Aurignacian, though the polyhedric graver does not occur after the Skiftien. The direct follow-on from the Middle Aurignacian to the Kebaran is by no means impossible, but it is not clearly demonstrated at Jabrud nor in the other sites, but the fuller publication of Ksâr 'Akil may clear up this point.

The two final layers of Cave III are described as Älteres Natufien and Neolithikum. Layer 2 is certainly Natufian, but the material is so scanty that it is not possible to be very definite as to which stage it belongs. The Neolithic from layer 1 is mixed and is in part Natufian, possibly with later elements.

In the foregoing pages we have attempted to examine the 45 layers from the three Jabrud caves and see if this sequence can be related to the rest of Palestine-Syria. It seems fairly clear that, in spite of Rust's sub-divisions and special terminology, the similarity between Jabrud and Palestine is very real. For the sake of clarity this will be summarized as follows :—

Layers 25–10 from Cave I equate with layers F and the E series from Tabun ; this includes the Jabrudien in spite of the lack of hand-axes and also the Prä-Aurignacien, which was shown to represent the junction between Ea and Eb. Layers 10 to 1 are recognisable facies within the Levalloiso-Mousterian of Palestine though the division into lower and upper is not possible. The Mikro-Mousterien appears to be special to Jabrud.

The Endmoustérien and the Älteres Aurignacien from Cave II layers 10 to 6 strongly suggest the industry with the double element from el-Wad and Abu Halka, in spite of the absence of the Emireh point. The Mittelaaurignacien, Jungaurignacien and the Endaurignacien from layers 5 to 1 are all recognisable stages within the Middle Aurignacian of el-Wad E–D₂, and this probably includes layers 10 and 9 of Cave III.

Layers 8 to 3 of Cave III appear to represent an extension of the industry from level C of Kebareh and other sites.

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- (25) S. ZAMIANIN. *Sovetskaya Etnografiya*, Leningrad, 1935. (English reference, H. FIELD, "Archaeology in the Soviet Union." *American Anthropologist*, 1936.)
- (26) C. S. COON. *Cave Exploration in Iran*, 1949. Museum Monographs. University of Pennsylvania, Philadelphia, 1950.
- (27) D. A. E. GARROD. "Excavations at the Cave of Shukbah, Palestine, 1928." *Proc. Prehist. Soc.*, VIII, 1942.

A Survey of the Evidence Concerning the Chronology and Origins of Iron Age A in Southern and Midland Britain

By KATHLEEN M. KENYON

Since the publication⁽¹⁾ of the scheme of Professor C. F. C. Hawkes for the division of British Iron Age material into A, B and C, evidence has accumulated for considerably more detailed sub-divisions and combinations, as Professor Hawkes himself anticipated. Professor R. E. M. Wheeler has rightly emphasized the fact that “the only safe general classification of Iron Age A in Britain is on a geographical, not a chronological basis.”⁽²⁾ Chronological evidence is indeed scanty. It is generally accepted that Iron Age A in Britain was a period of peaceful development and cultural stagnation. Professor Wheeler again has emphasized the dangers of using degrees of devolution in pottery forms as a chronological yard-stick.⁽³⁾ One can say that sharply angular types are closer in form, and therefore, within their own local group, nearer chronologically to their predicated metal prototypes. But it may be observed that it was not at only one instant—that of the transition in Central Europe from Hallstatt to La Tène—that pottery makers of Late Hallstatt stock came in contact with metal forms, either of Hallstatt or La Tène culture. It is clear that outside the centre of gravity of the La Tène culture, groups of Late Hallstatt peoples maintained their earlier culture side by side with their more advanced neighbours, and may well from time to time have received in the course of trade metal vessels which influenced their pottery forms.⁽⁴⁾ Examples of such retarded groups may be found in Central France and, probably more pertinently with reference to Britain, in the Low Countries.⁽⁵⁾ Since, as will be suggested below, the different Iron Age A groups in Britain have divergent continental origins, it may well be that the ancestral groups on the Continent received the influences formative of their particular types of pottery, some of them Hallstatt, some of them La Tène, at different periods within a fairly long range of time. For a number of separate immigrations at different periods, the various waves of La Tène and Germanic expansion provide sufficient occasions.

(1) C. F. C. Hawkes, “Hill Forts,” *Antiquity*, V.

(2) Wheeler, *Maiden Castle*, Dorset, p. 186.

(3) *Ibid*, p. 187.

(4) Cf. J. B. Ward Perkins, “The Pottery of Gergovia in relation to that of other sites in Central and S.W. France,” *Arch. J.*, XCVII.

(5) Hawkes & Dunning, “The Belgae in Gaul and Britain,” *Arch. J.*, LXXXVII; and H. N. Savory, “An Early Iron Age Site at Long Wittenham, Berks,” *Oxoniensia*, II, p. 10.

For the most part, also, imported objects or their direct local copies do not give much closer dating. In particular, it has been shown that La Tène I brooches continued in use in Britain long after they were superseded on the Continent.⁽⁶⁾ Imports of traceable continental origin are in any case scanty, due, no doubt, on the one hand, to the backward and stagnant nature of established Iron Age groups, and on the other hand to the fact that such fresh Continental groups as may have arrived later were themselves no doubt backward groups pushed out before the expansion of their more developed neighbours. There are a few exceptions to this lack of chronological value in imported objects, and these are referred to below.

Finally, a regrettably small proportion of the best finds come from scientific excavations, and even among the properly excavated sites comparatively few afford much stratigraphic evidence of successive stages. On some sites a little dating evidence is provided by the arrival of some form of Iron Age B influence, but there is no single site in which good fixed dates are combined with good stratigraphic succession.

It therefore results that this survey is mainly concerned with the isolation of regional characteristics and the area of their distribution. A comparison of the now copious published material does identify such regional characteristics, and suggests that there are the following groups for which variations in origin may be postulated (map, Fig. 1) :—

1. Wessex, with sub-groups in W. and E. Dorset.
2. Upper Thames.
3. East Anglia and the basins of the tributaries of the Wash.
4. The South Downs Area.
5. The Thames Estuary.
6. The Trent Basin.
7. The West Midlands.

REGIONAL GROUPS

1. WESSEX. *Major Sites.*

All Cannings Cross.	Open village or farmstead site.
Little Woodbury.	Farmstead.
Hengistbury Head.	Port.
Fifield Bavant.	Occupation site.
Swallowcliffe Down.	Hill fort.
<i>West Dorset sub-group.</i>	
Maiden Castle.	Hill fort.
<i>East Dorset sub-group.</i>	
Kimmeridge.	Industrial site.

(6) *Maiden Castle*, p. 253 ; Hawkes, *Proc. Hants. Field Club and Arch. Soc.*, XIII, p. 37.

THE CHRONOLOGY OF IRON AGE A

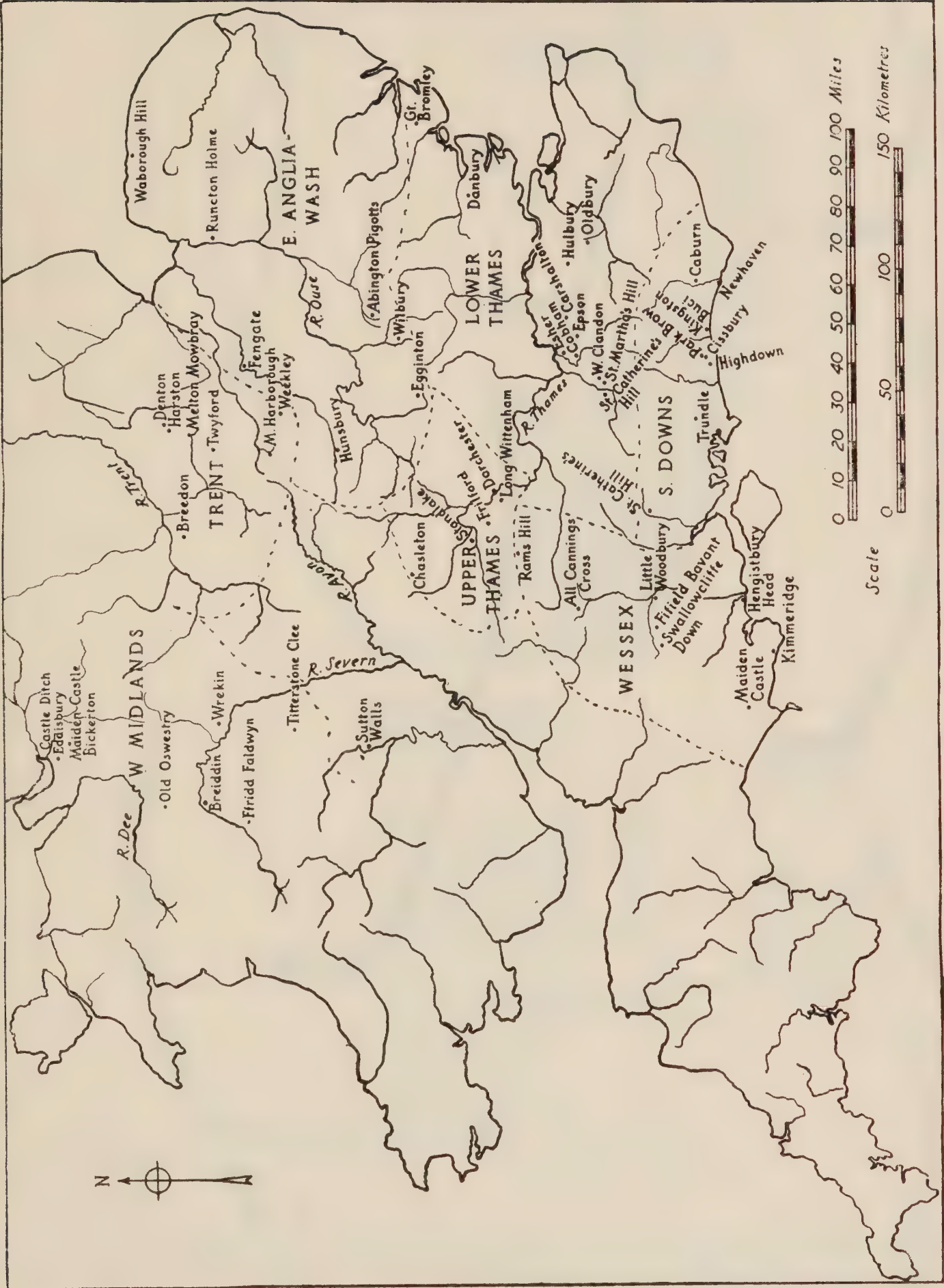


Fig. 1. Map to illustrate regional groups of Iron Age A. (Sites are all Iron Age A, except Oldbury and Sutton Walls.)

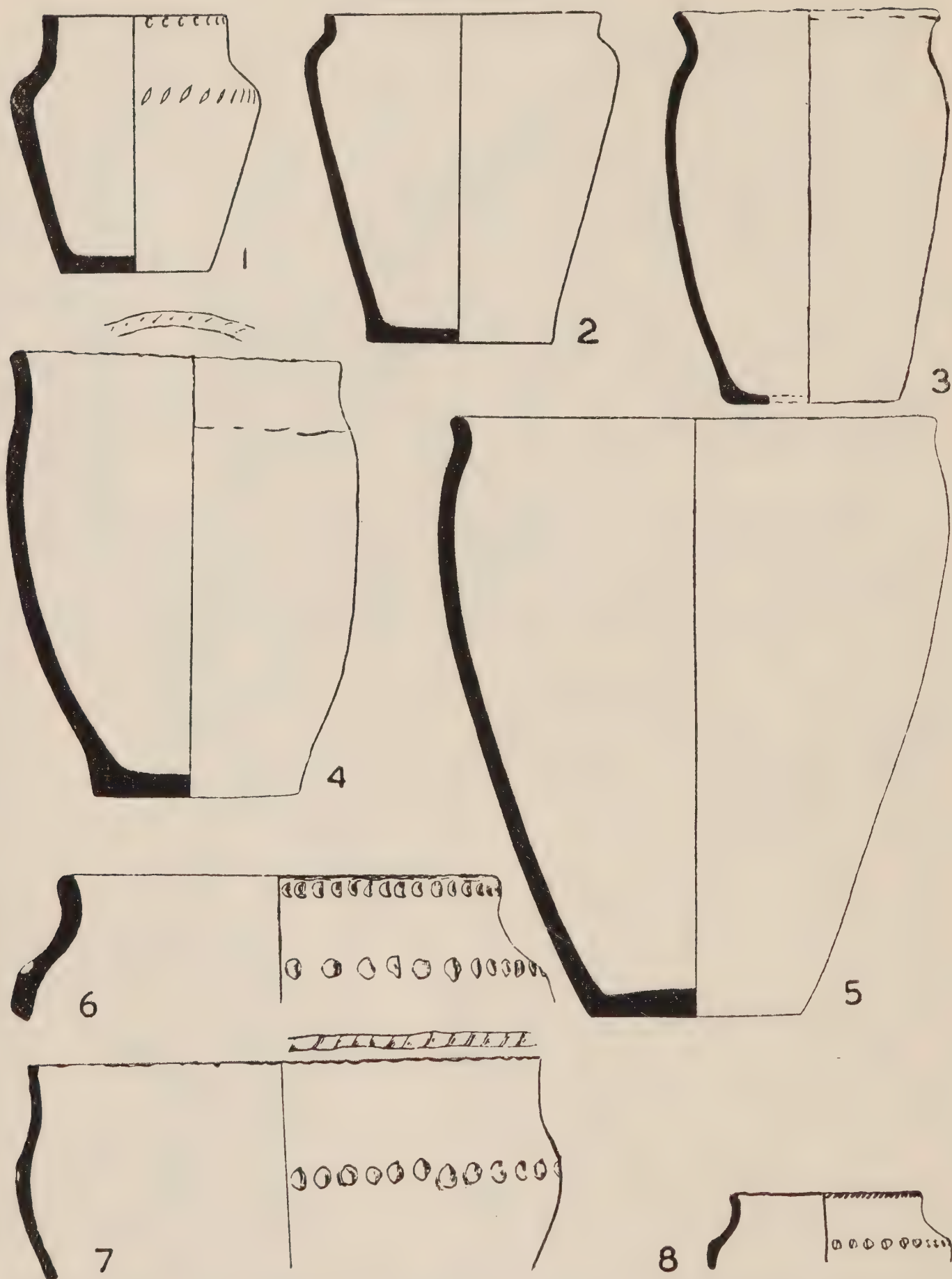


Fig. 2. Wessex: *All Cannings Cross*: 1, Pl. 29, 5; 2, Pl. 30, 1. *Little Woodbury*: 3, Fig. 2, 1c; 4, Fig. 2, 1b; 5, Fig. 2, 1d. *Hengistbury Head*: 6, Pl. XVI, 11; 7, Pl. XVI, 10; 8, Pl. XVI, 12.

THE CHRONOLOGY OF IRON AGE A

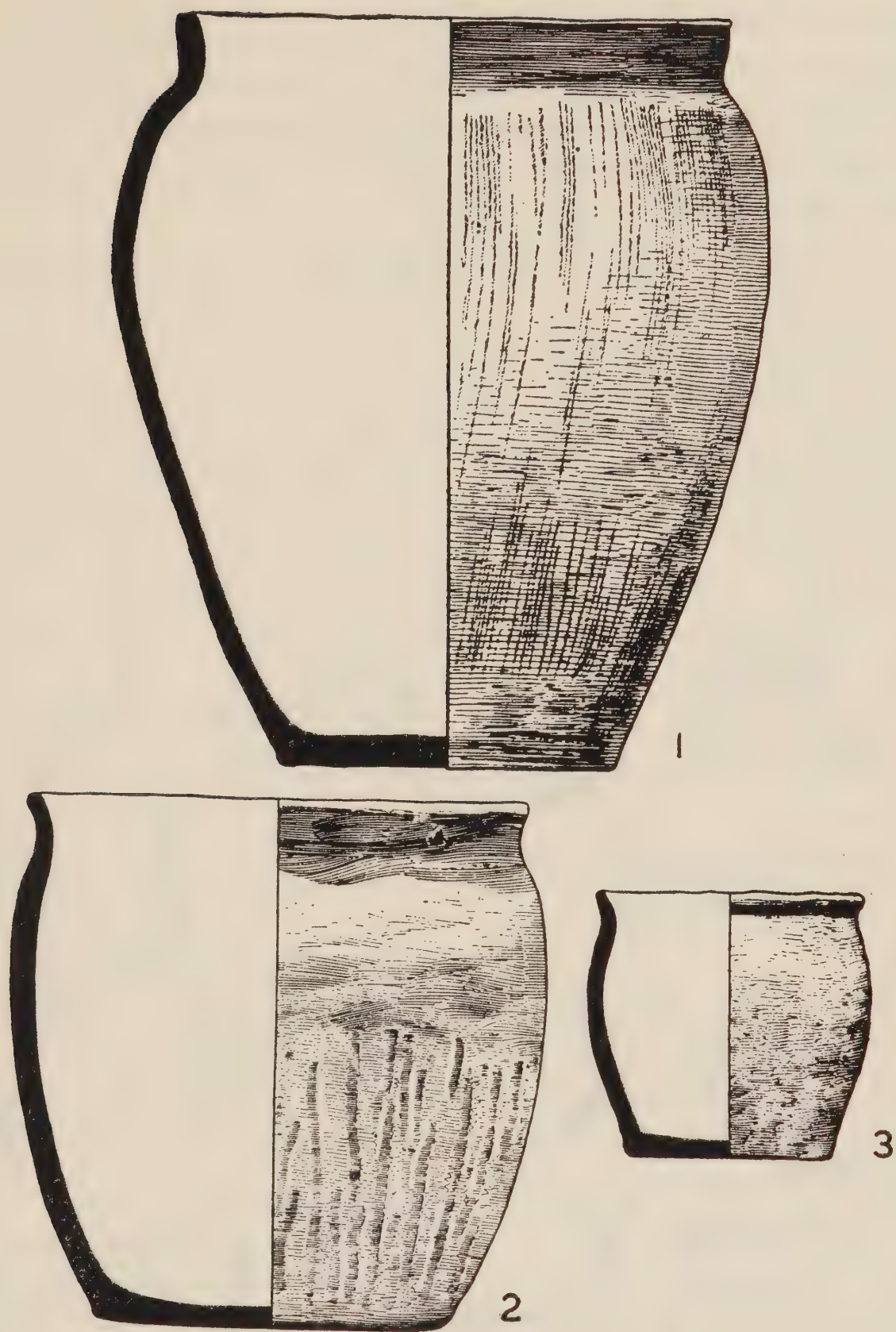


Fig. 3. Wessex : Maiden Castle : 1, Fig. 57, 31 ; 2, Fig. 58, 42 ; 3, Fig. 57, 24.

Professor Wheeler has classified two main categories of Maiden Castle Iron Age A pottery as situlate jars and small bowls, and has described the former as the common

denominator of the British Iron Age A.⁽⁷⁾ Situlae do in fact occur in all Iron Age A areas, but, as will be seen, the forms of this type of vessel in the different areas are distinctive, and can, in fact, be used in differentiating the regional groups. The typical Wessex situla has a fairly high shoulder, which in the presumably early specimens is sharp, and an approximately upright neck with mouth appreciably narrower than its shoulder (Fig. 2, 1). The general impression is that of a slightly splayed bucket, which is in fact that of its metallic prototype.

In the specimens more devolved in appearance, the shoulder becomes more rounded, the neck remains upright or very slightly everted, and the mouth may be nearly as wide as the shoulder (Fig. 2, 7).

In a number of examples, usually those of sharpest form, the rim and shoulder are decorated with finger-printing or nail incisions. This immediately suggests comparison with Late Bronze Age pottery of Deverel-Rimbury type, and is presumably a legacy, here or in its continental home, of this culture. In Wessex, this characteristic may be considered as an early feature,⁽⁸⁾ but not, as will be seen, elsewhere.

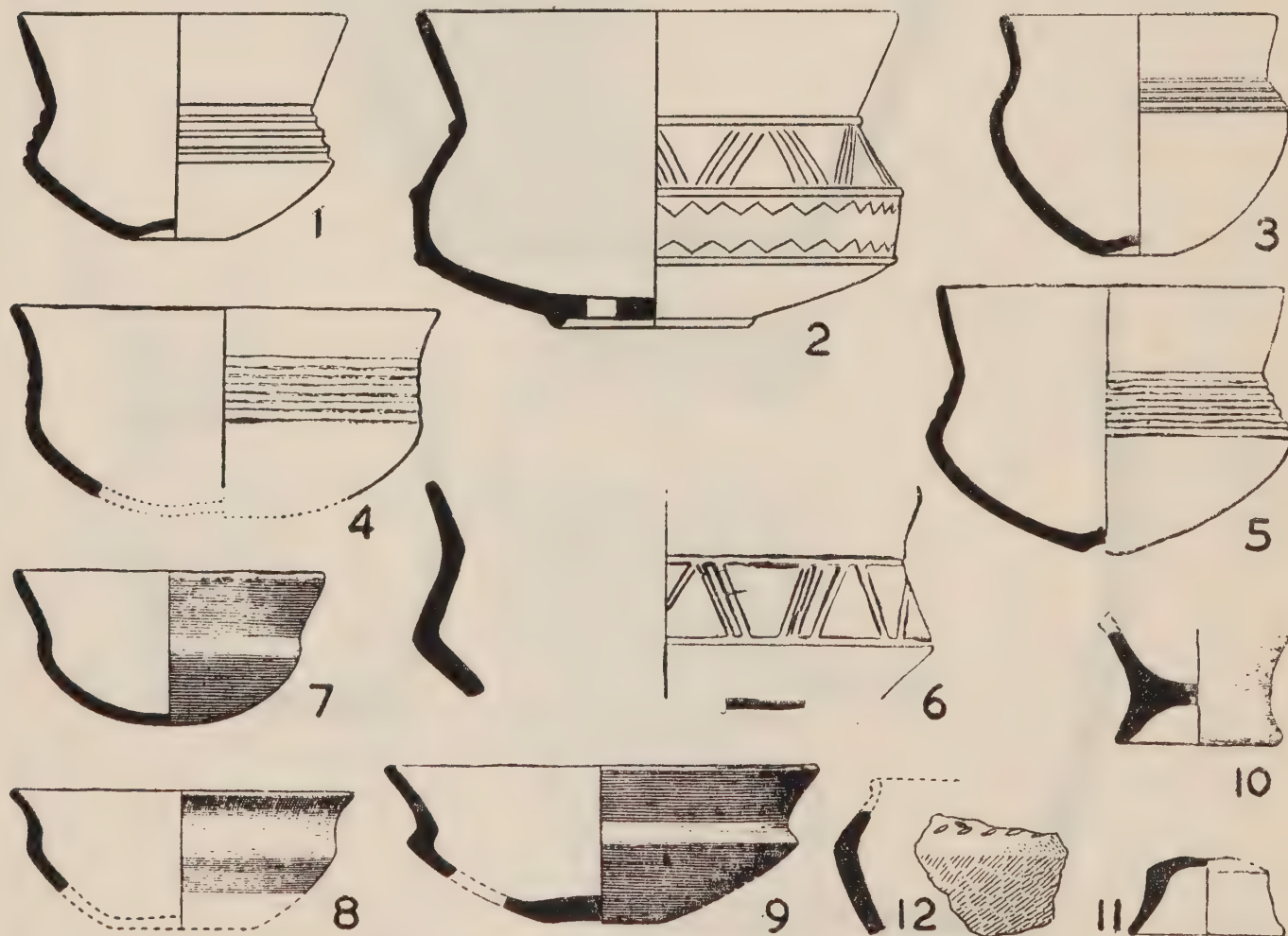


Fig. 4. Wessex: *All Cannings Cross*: 1, Pl. 28, 1; 2, Pl. 28, 3; 3, Pl. 28, 6. *Little Woodbury*: 4, Fig. 3, 2 a i. *Hengistbury Head*: 5, Pl. XVI, 1; 6, Pl. XVI, 5. *Maiden Castle*: 7, Fig. 56, 6; 8, Fig. 56, 7; 9, Fig. 56, 5; 10, Fig. 60, 76. *Hengistbury Head*: 11, Pl. XVI, 19. *Kummeridge*: 12, Fig. 5, 6.

(7) *Maiden Castle*, p. 187.

(8) *Maiden Castle*, p. 187; Hawkes, *St. Catherine's Hill*, p. 105.

In the forms of the small bowls, as Professor Wheeler has pointed out⁽⁹⁾, are shown the sub-divisions of the Wessex group, but they have a common characteristic of haematite coating (presumably to give a metallic appearance). In the main Wessex group the typical form has a sharply angular carination, above which the wall is inclined in and makes a sharp angle with a flaring rim of approximately the same height as the wall. The width of the rim and of the carination are approximately equal. The base is often omphaloid. An earlier type is ornamented with grooves above the carination, and a later with cordons and with multiple chevrons incised after firing above and below the carination (Fig. 4, 1-6).

The Western Dorset (Maiden Castle) bowl type has a very sharp carination in the typologically early form, more rounded later, with the rim flaring out almost immediately above it, the diameter of the rim being distinctly greater than that of the carination. The base may be round or slightly dished. There is no decoration (Fig. 4, 7-9).

The Eastern Dorset type is illustrated by finds from a very restricted area of excavation on the Kimmeridge cliffs, which show that the earliest exploiters of the shale industry here were Iron Age A people. Like all the Wessex groups of this period, they used haematite to coat pottery vessels, both fine and coarse. No sufficiently large fragments were recovered to show the situla form, but the upper parts of bowls were represented by a number of sherds. These have the sharply angular shoulder of the main Wessex type and the West Dorset sub-group, but lack the flaring rim found in both of these types. Instead, above a sloping shoulder, the lip is slightly everted or thickened (Fig. 4, 12). The form occurs both in haematite-coated and plain wares.

Together with these common forms are a very few pedestal bases (Fig. 4, 10-11) in undoubted A contexts, suggesting contact with La Tène forms. At Maiden Castle it is clear that these forms occur throughout the Iron Age A levels. They are also found at Fifield Bavant and Swallowcliffe Down.⁽¹⁰⁾

It has long been recognised that the Wessex Iron Age A derives from Late Hallstatt continental sources, especially from Northern France. The situla form is descended from the Hallstatt bronze situla, and though continental pottery parallels are lacking, it is distinct from the bead-rimmed La Tène pottery situlae. The bowl forms of both the main Wessex group and the Dorset sub-groups can be satisfactorily derived from a source such as Les Jogasses (Marne).⁽¹¹⁾ The metallic prototype of such bowls is well illustrated by the bowl from the Welby hoard.⁽¹²⁾ This is clearly an import, and the hoard as a whole is ascribed to the sixth century B.C. There is no evidence that the ceramic bowls were copied from the metallic in Britain; the translation more probably took place nearer the Central European home of the metal bowls.

(9) *Ibid.*, p. 187-8.

(10) *Wiltshire Arch. Mag.*, XLII, pl. VII; XLIII, pl. IV.

(11) P. M. Favret, "Les Nécropoles des Jogasses à Chouilly," *Préhistoire*, V, Fig. 45.

(12) T. G. E. Powell, "A Late Bronze Age Hoard from Welby, Leicestershire," *Arch. J.*, CV.

Professor Wheeler and Dr. Oakley have shown that the practice of haematite-coating on the ceramic bowls must have been acquired between the expulsion of Late Hallstatt groups such as those of Les Jogasses from their home on the Marne and their arrival in Britain, probably in the Brittany-Normandy coastal area.⁽¹³⁾

The distribution map of haematite wares⁽¹⁴⁾ indicates the area covered by the Wessex A group and the areas with which it had contacts. From it should be subtracted the two sites on the Kent coast, for here, as Mr. Frere has shown, the technique was different. The main concentration is Dorset, Wiltshire, Hampshire, with a northern effective margin on the northern slopes of the Berkshire Downs, only scattered sherds being found beyond.⁽¹⁵⁾ A scatter along the North and South Downs may mean subsequent expansion or even in some cases only trade, but not primary settlement, for in all cases this practice is rare.

An outline of the chronology in this region can be given, but there is much that is still uncertain. A first arrival soon after 400 B.C. seems fairly certain. As has already been said, the bulk of the pottery is definitely Late Hallstatt, and its connections are with the Marne area. The only sign of contact with La Tène are the La Tène I brooches—which, since they are the only types securely associated with Iron Age A sites, show that the emigrants must have left the Continent after they had become current—and the rare pedestal bases. The establishment of La Tène on the Marne must be somewhere between 450—420 B.C., and since any appreciable length of contact would have left greater signs than exist, the emigrants may be presumed to have left their homes soon after that date, and to have started to arrive in Britain soon after 400 B.C., a date with which the dating of brooch types agrees.⁽¹⁶⁾

It was shown at Maiden Castle that Iron Age A lasted on with little change until the arrival of a South-Western B group in 56 B.C. Within the three hundred and fifty years thus covered by Wessex A, the fixing of dates is a matter of probabilities, of estimating the length of occupation suggested by accumulation of material, replacement of posts and so on, or of degrees of devolution of forms, with possible cross checks by associating fortification periods with precautions against invaders who can probably be ascribed to the third century. None of these methods can be expected to be accurate within a fairly wide margin.

2. THE UPPER THAMES.

Sites.

Long Wittenham, Berks.	Occupation site.
Mount Farm, Dorchester, Oxon.	Village or farmstead site.

(13) *Maiden Castle*, p. 190 and p. 379 ff., with distribution map Fig. 55. The discussion and distribution is supplemented by S. S. Frere in *Ant. J.*, XXII, p. 129 ff., and *Ant. J.*, XXVII, pp. 45–6.

(14) *Maiden Castle*, Fig. 55.

(15) J. S. P. Bradford and R. G. Goodchild, "Excavation at Frilford, Berks, 1937–38," *Oxoniensia*, IV, p. 6.

(16) *Maiden Castle*, p. 192.

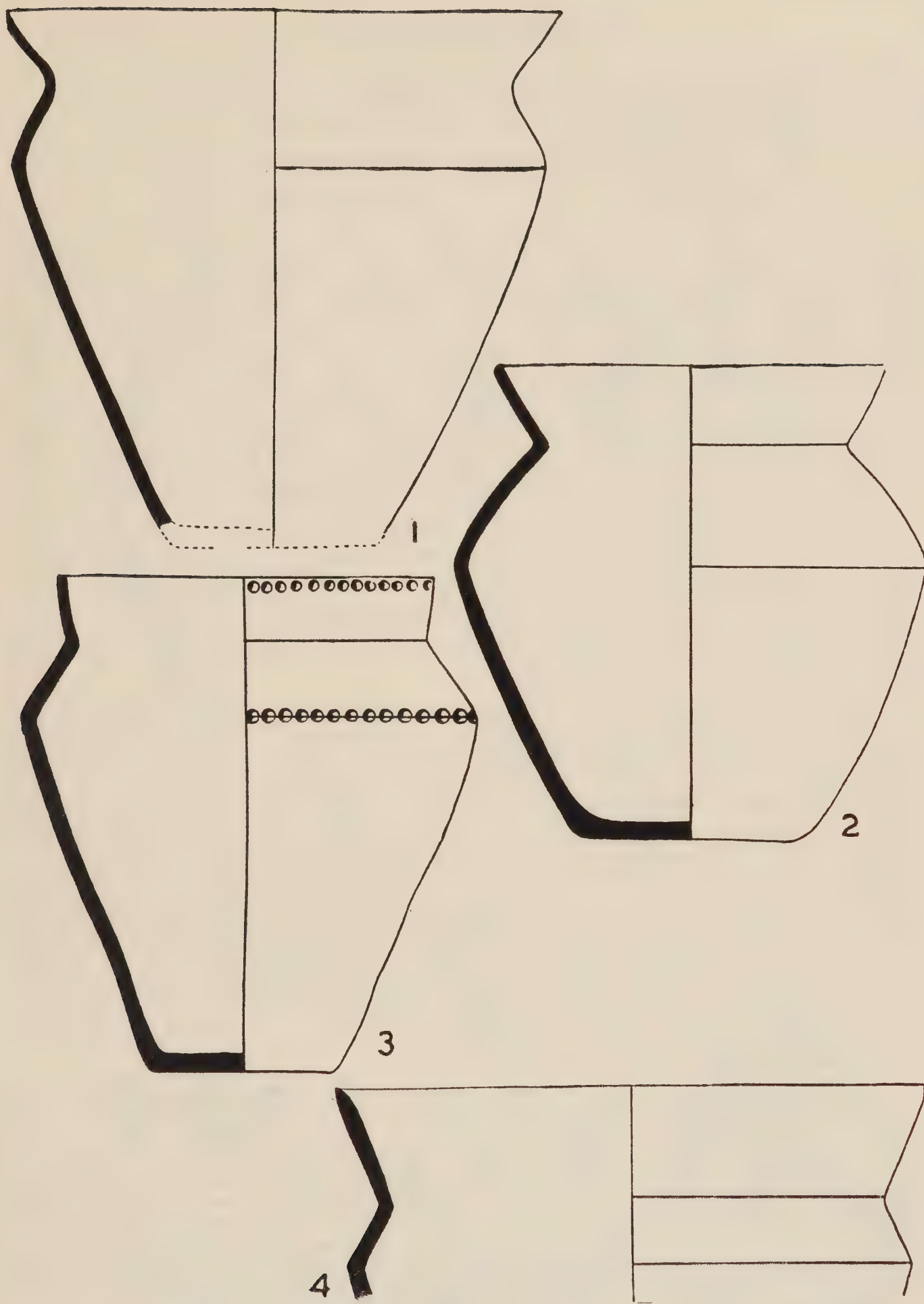


Fig. 5. Upper Thames : *Long Wittenham* : 1, Fig. 2, 1 ; 2, Fig. 2, 2 ; 3, Fig. 2, 3. *Standlake* : 4, Fig. 4, 4.

Frilford, Berks.	Occupation and sacred site.
Chastleton, Oxon.	Hill fort.
Rams Hill, Uffington, Berks.	Hill fort.
Allen's Pit, Dorchester, Oxon.	Quarry finds. Possibly farmstead enclosure.
Standlake, Oxon.	Village or farmstead site.

The area under discussion may be broadly described as the valley of the Thames and its surrounding slopes, above the Goring Gap. Consideration of physiography would suggest that in prehistoric times it would have been accessible from three main directions. The Thames Valley forms one obvious line of approach. To the north-west the region impinges on the Cotswolds and therefore the Jurassic Zone route, with potential contacts to south-west and north-east. To the south and east it runs up on to the Berkshire Downs, Chilterns and Northamptonshire Uplands route, thus connecting with Wessex in the south and East Anglia and the Wash rivers in the east. Therefore, a mixture of influences may be expected and is, in fact, seen.

Some of the groups of pottery have rounded and devolved forms, but others are sharp and typologically early. It has already been pointed out that this statement does not necessarily imply contemporaneity with other typologically early forms, when the line of descent does not appear to be the same. In the case of the typologically early forms of the Upper Thames, it is quite clear that there is no direct connection with the Wessex forms.

The sites which produce the early forms in question are Long Wittenham, Allen's Pit, Dorchester and Standlake, all sites near the Thames or its tributaries. The characteristic forms differentiating this group from Wessex are the situlate jars and the bowls, while haematite-coating is lacking. The situla has a markedly sharp carination, a broad shoulder, inclined well in, making a sharp angle with the rim, which is usually sharply flaring, sometimes to beyond the carination, but is sometimes upright (Figs. 5, 1-4, 6, 1). A particularly interesting example is from Allen's Pit (Fig. 6, 1), where a line and two rows of incisions at the neck angle obviously represent the riveting of the bronze prototype. A type of decoration which is characteristic of these groups, and which survives in the more devolved groups in the region, is a series of dimples (larger and more regular than finger printing) on the carination and sometimes below the rim.

The bowl form is sharply carinated, with the wall more sharply inclined in than the Wessex bowl, and shorter than this but longer than the Maiden Castle bowl. The rim is high and flaring, projecting slightly beyond the carination (Fig. 6, 2-4). The base of the only completely preserved specimen (*Long Wittenham*, Plate II, 3) is omphaloid. The bowls are of fine hard ware, all undecorated, and have a burnished grey, chocolate or buff surface. An interesting specimen from Long Wittenham is Fig. 6, 6, since it has close Continental parallels, of which two from Côte d'Or and Court-St. Etienne, near Brussels, are illustrated in the report (Fig. 6, 7 here).

THE CHRONOLOGY OF IRON AGE A

In addition to these bowls, there was a class of carinated decorated bowls which may have been similar in form, but in no case do they survive beyond the angle of the carination and the wall above (Fig. 6, 8-12). The decoration is rectilinear, and

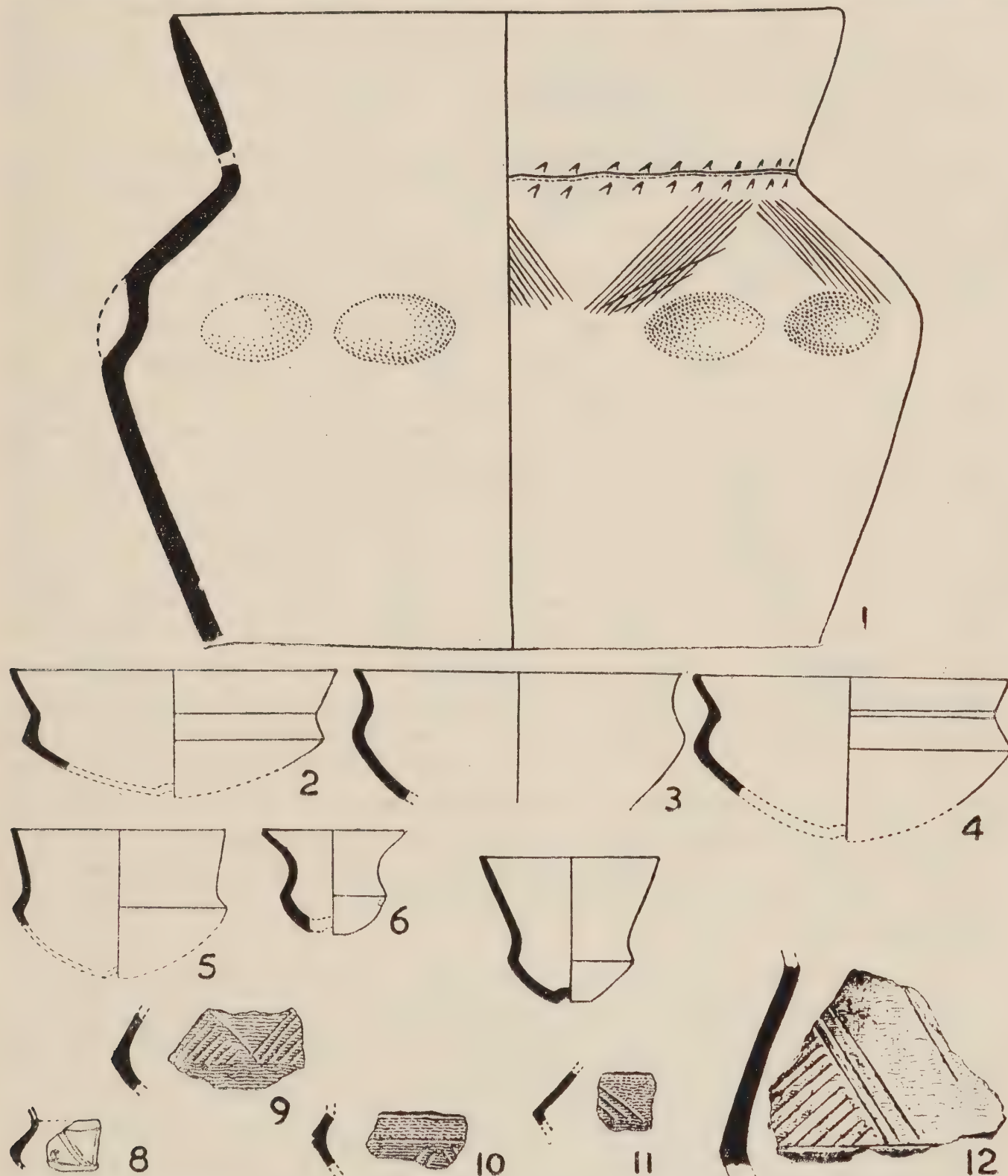


Fig. 6. Upper Thames : *Allen's Pit* : 1, Fig. 8, 3 ; *Long Wittenham* : 2, Fig. 2, 8 ; 3, Fig. 2, 7 ; 4, Fig. 2, 9 ; 5, Fig. 2, 6 ; 6, Fig. 2, 10. *Cosne, Côte d'Or* (in *Long Wittenham*) : 7, Fig. 2, 24. *Long Wittenham* : 8, Fig. 2, 11. *Allen's Pit* : 9, Fig. 11, 17 ; 10, Fig. 11, 9 ; 11, Fig. 11, 3. *Standlake* : 12, Fig. 3, 10.

seems to consist of combinations of chevrons and stroke-filled triangles. Chevrons are common at All Cannings Cross, but are there typically incised after firing, which is not apparently the case in the Upper Thames region. Stroke-filled triangles are also found at All Cannings Cross, but are not apparently common. The decoration therefore, has affinities with the Wessex group, but not very close ones. No examples of haematite-coating occur at Long Wittenham or Allen's Pit, and there are only some rather doubtful sherds at Standlake.

It is thus clear that the group here selected as typologically early cannot be derived from Wessex. In discussing the derivations of the Long Wittenham group,⁽¹⁷⁾ Dr. H. A. Savory has suggested that its origin must be sought in a backward area, which retained its main Hallstatt characteristics long enough to acquire a few La Tène forms, particularly the fine carinated bowls. Though there are parallels on the Marne and Aisne, he rejects these areas as sources since there the groups are too rich in Marnian features which do not appear in the Upper Thames groups. He suggests that the probable place of origin is in the area composed of Hainault, Artois and Picardy. The route of entry into the country must almost certainly have been the Thames. Not only is this suitable if the suggested point of departure is correct, but the differences between this group on the one hand and the Wessex and East Anglian groups on the other preclude arrival by other possible routes. The location of the three sites close to the Thames is additional confirmation. As regards dating of this group, there is no direct evidence. It has already been pointed out that closeness to metallic prototypes cannot be used as dating evidence unless it is known when contact with metallic vessels occur. Having postulated that the source of origin is a *backward* Hallstatt group with some slight contact with La Tène, a fairly wide margin must be allowed for La Tène influence in proportion to the backwardness and remoteness of the group. It cannot therefore be claimed that this group is in origin as early as the Wessex group, with its presumed origin much nearer the centre of La Tène culture. Any suggestion of a date can therefore at present (until there is much more Continental evidence available) be only a guess, and, as such, a date about the end of the fourth century is put forward, as allowing about sufficient time for the later developments found in the region.

At a number of other sites in the Upper Thames region, such later developments are shown. In these, influence from other groups is, as might be expected (*cf.* p. 38 above), visible. At Mount Farm, Dorchester, the characteristic situla of the last group dealt with is absent, and its place is taken by a type much closer to the Wessex type (Fig. 7, 1-3). On the other hand, the type of fine bowl seems to be close to the first Upper Thames group (Fig. 4, 7). It is possible that the Mount Farm group has a separate continental origin, rather closer to that of the Wessex group, but that does not seem very probable, particularly in view of the close proximity of the Allen's Pit

(17) *Oxoniensia*, I, p. 8 ff.

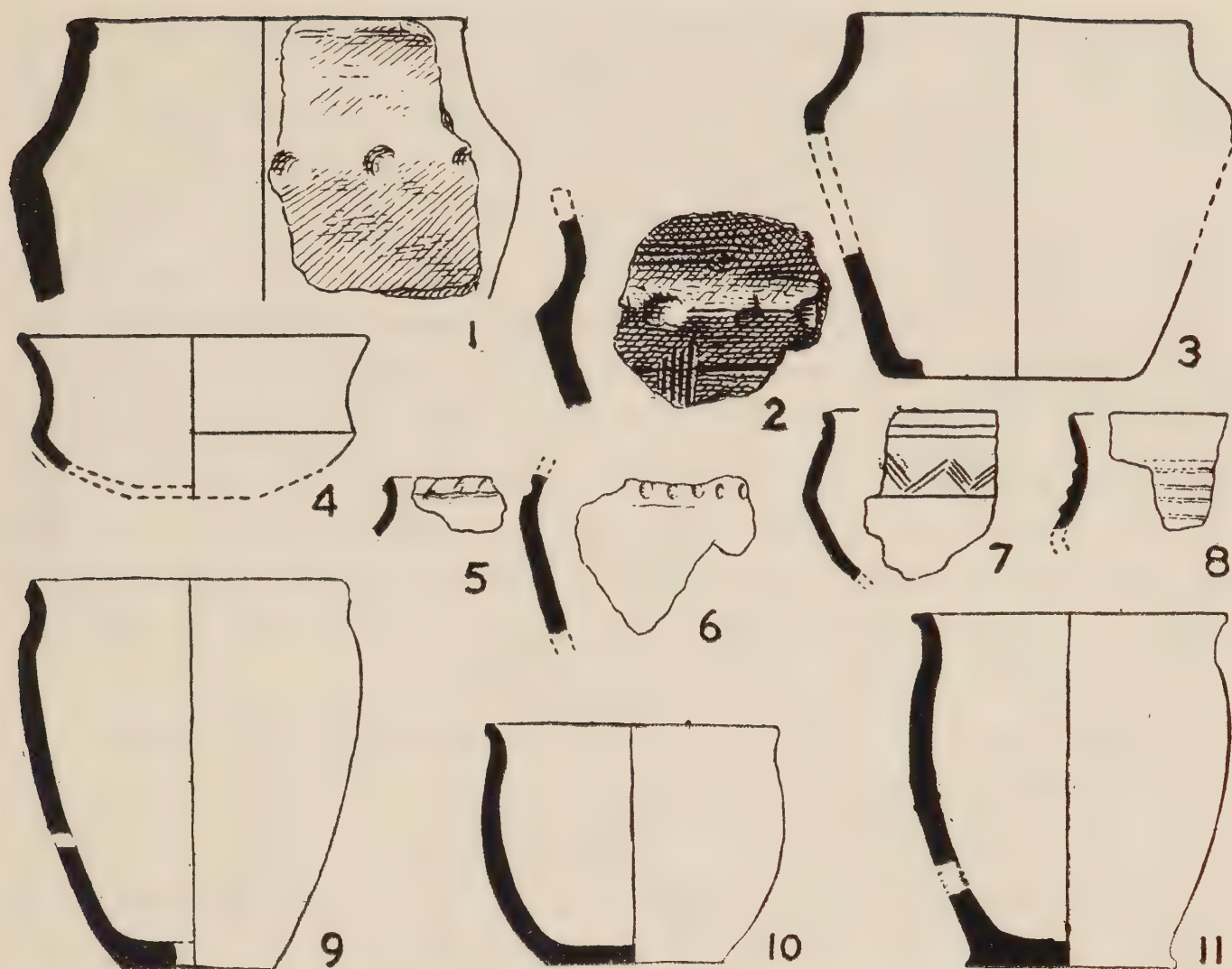


Fig. 7. Upper Thames : *Mount Farm* : 1, Fig. 6, θ 5 ; 2, Fig. 6, μ 7 ; 3, Fig. 6, μ 8 ; 4, Fig. 6, D 8 B V 1. *Rams Hill* : 5, Fig. 5, 9 ; 6, Fig. 5, 3 ; 7, Fig. 5, 1 ; 8, Fig. 5, 2. *Frilford* : 9, Fig. 6, 34 ; 10, Fig. 6, 39 ; 11, Fig. 6, 33.

site. A direct Wessex derivation is ruled out by the difference of bowl forms and the absence of haematite-coating. The most probable solution is that the site is later than that of Allen's Pit, possibly its successor, since the absence of much sign of devolution there suggests a comparatively short existence, that by this time the metallic forms of the situlae had been lost, and that under some Wessex influence the heavier form, found in small quantities at Allen's Pit, became predominant. No forms suggesting devolution from the type of Figs. 5, 1-4 ; 6, 1, are in fact found on any site. That Wessex influences did enter the area will be seen below. It is in any case clear that the site continued later, for it received AB and even some Belgic influences.

Clear evidence of Wessex influence is found at Rams Hill, Uffington and Frilford. At the former site, which could be considered geographically as an outlier of the Wessex area, about 15 per cent of the sherds are haematite-coated, and there is an example of a typical Wessex furrowed carinated bowl, as well as incised decoration with white inlay (Fig. 7, 7-8). On the other hand, Upper Thames influence is seen on two situla shoulder-fragments decorated with dimples (Fig. 7, 6).

More striking as an example of Wessex penetration into the Upper Thames region is Frilford, for that is a valley site. It is clearly a comparatively late one and in fact exhibits strong AB influences which suggest a late date. The A forms are very devolved, probably descended from the Mount Farm types (Fig. 6, 9-11), or direct from Wessex forms. A considerable number of fine carinated bowls are haematite-coated, but the form is the Upper Thames rather than the Wessex one. Moreover, there are a number of examples of the Upper Thames dimple decoration. The haematite wares and purely A forms seem to be for the most part stratigraphically earlier than the AB and B wares. The terminal date for these last is neatly given by the immediate supersession of the Iron Age huts and sacred site with which they were associated by a Roman Temple and structure of Flavian date. An original date for the site in the fourth century is most unlikely. It is suggested above that there is at present no evidence for an early beginning of Iron Age A in this region (though it is not ruled out), and it is clear that the A coarse wares on this site are very devolved, so for both reasons the sharply carinated bowls cannot be used to prove such an early date. A second century initial date would appear more probable.

3. EAST ANGLIA AND THE BASINS OF THE TRIBUTARIES OF THE WASH.

Sites.

West Harling.	Farmstead site.
Abington Pigotts.	Occupation site.
Warborough Hill, Stiffkey.	Tumulus with cremation burials (much disturbed).
Runcton Holme	Found in gravel digging. Probably open occupation site.
Fengate, Peterborough	Found in gravel digging. Occupation site.
Hunsbury	Hill fort.

Mr. R. Rainbird Clark has shown⁽¹⁸⁾ that geography and geology have combined to divide East Anglia into two zones suitable for prehistoric occupation, for a zone of impervious clay, running north and south, separates two areas of lighter pervious soil, the coastal fringe on the east and the chalk belt on the west. His map (*op. cit.*, Plate VIII) shows that, in the Iron Age, occupation was in fact concentrated on the chalk belt, with, in addition, a separate and largely independent group in S.E. Suffolk in the Ipswich area.

The main occupation area thus flanks the Fenland. This was apparently itself largely unoccupied, but it is nevertheless important since through it flow the main rivers emptying into the Wash. It is clear that these rivers were the routes by which the new Iron Age peoples entered the country, for it is along their tributaries, penetrating into the East Anglian chalk-belt, that traces of Iron Age occupation are found.

(18) "Iron Age of Norfolk and Suffolk," *Arch. J.*, XCVI.

THE CHRONOLOGY OF IRON AGE A

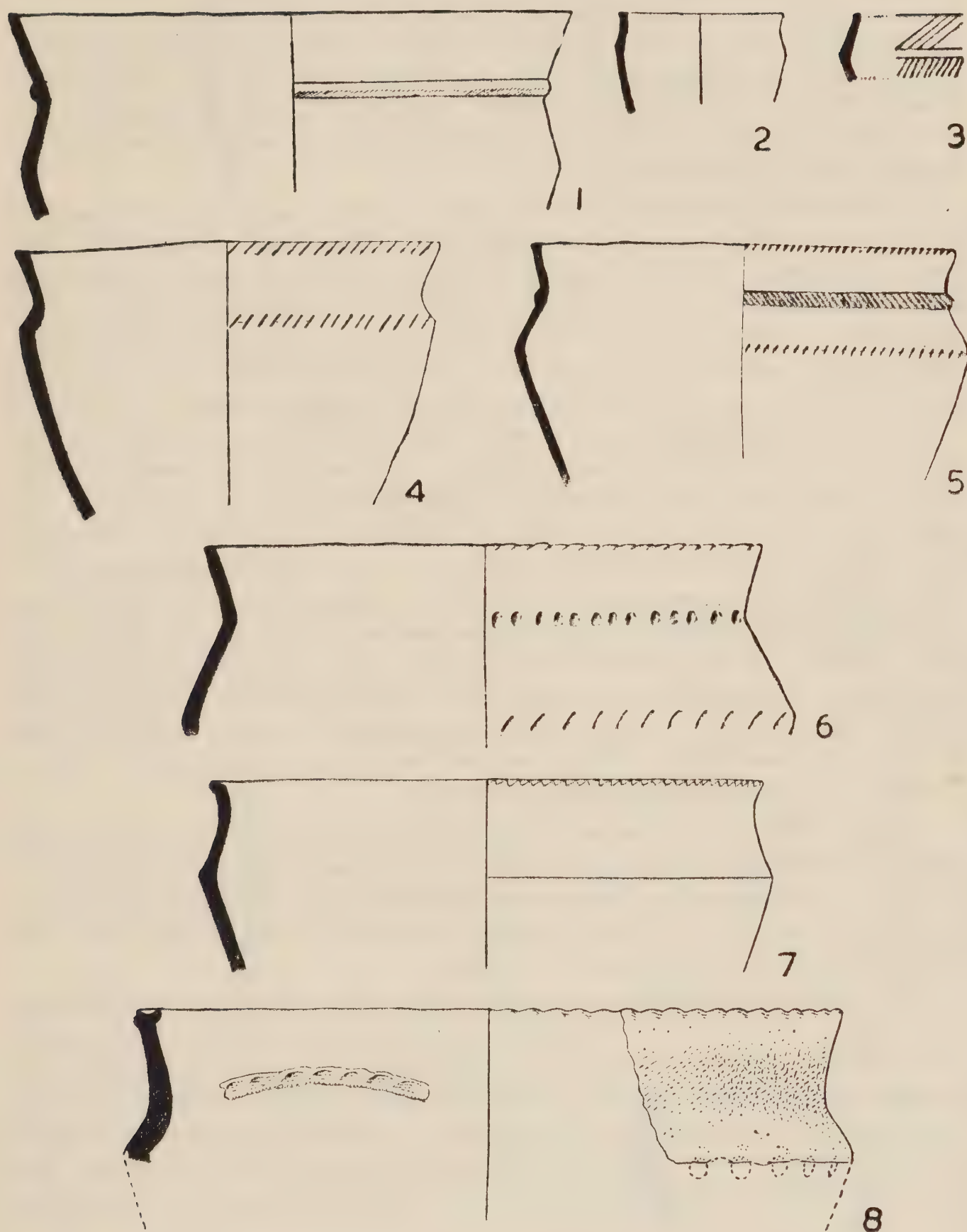


Fig. 8 East Anglia—Wash : *Fengate* : 1, Fig. 1, A2 ; 2, Fig. 1, A3 ; 3, Fig. 1, A5 ; 4, Fig. 3, D3 ; 5, Fig. 4, G1 ; 6, Fig. 4, I1 ; *Warborough Hill* : 7, Fig. 6. *Abington Pigotts* : 8, Fig. 2, A.

These same rivers, moreover, have their sources far into the uplands of the Jurassic zone ridge and the more southerly Berkshire Downs—Chilterns—Northamptonshire Uplands ridge, thus bringing, as will be seen, these areas into the same sphere of influence. Further connections between East Anglia and Southern Britain are provided by the Icknield Way along the chalk ridge, linking up with the same Northamptonshire—Chilterns route to the south-west.

A diagnosis of the pottery shows that the area of the basins of the tributaries of the Wash does in fact form a cultural region during Iron Age A, distinct from those already considered. The vessel especially distinctive of this group is a situla form, characterized especially by a high, wide shoulder. Above the shoulder the neck either splays out, making the lip wider than the carination, or is concave and approximately upright, making the rim diameter the same as the carination (Fig. 8, 1, 4-8; 9, 1-2). In a very large number of examples there is finger-printing or nail incisions on the rim and shoulder, and in some instances there is an applied plastic band, sometimes finger-printed, or a line of direct finger-printing, on the neck, midway between shoulder and rim. The general impression given by these vessels is of a type somewhat more primitive and nearer to the Late Bronze Age than the situlate vessels of the groups already discussed. The vessel is indeed the L.B. urn with the incorporation of a marked shoulder, retaining the L.B. addiction to finger-printing to a much more marked degree than elsewhere. It may be compared with the Castle Hill, Scarborough, pottery which probably represents the equipment of an earlier group of immigrants from an allied continental source, though it may be doubted whether this group should truly be called Iron Age A, in spite of a little associated iron, since the pottery lacks the Iron Age characteristics of other sites in Britain, and is much closer to that of the Hallstatt groups with a Bronze Age equipment.

Rainbird Clark has emphasized⁽¹⁹⁾ the probable continuity of Late Bronze—Early Iron Age occupation in East Anglia, and also the strong Rhineland connections of this area in both periods.⁽²⁰⁾ Either in the Rhineland (more probably) or in Britain, Late Bronze Age urn-field groups acquired examples of the metallic situla, and modified their native urns in imitation thereof.

East Anglia has produced one site with dating evidence, the settlement at Fengate, Peterborough. From this site a series of pits (cleared in the course of commercial gravel-working) have been arranged in a chronological sequence by Miss Fell and Professor Hawkes, and though from the nature of the excavations this has had to be on typological grounds, the result is satisfactory. At the head of the series is placed a pit in which was a swan-necked pin with bronze disk head, which the authors have shown⁽²¹⁾ must have reached Britain from the Lower Rhine area not long before

(19) *I.A.N.S.*, e.g., p. 25.

(20) *Ibid.*, p. 28.

(21) *Fengate*, p. 197 ff., and p. 217.

THE CHRONOLOGY OF IRON AGE A

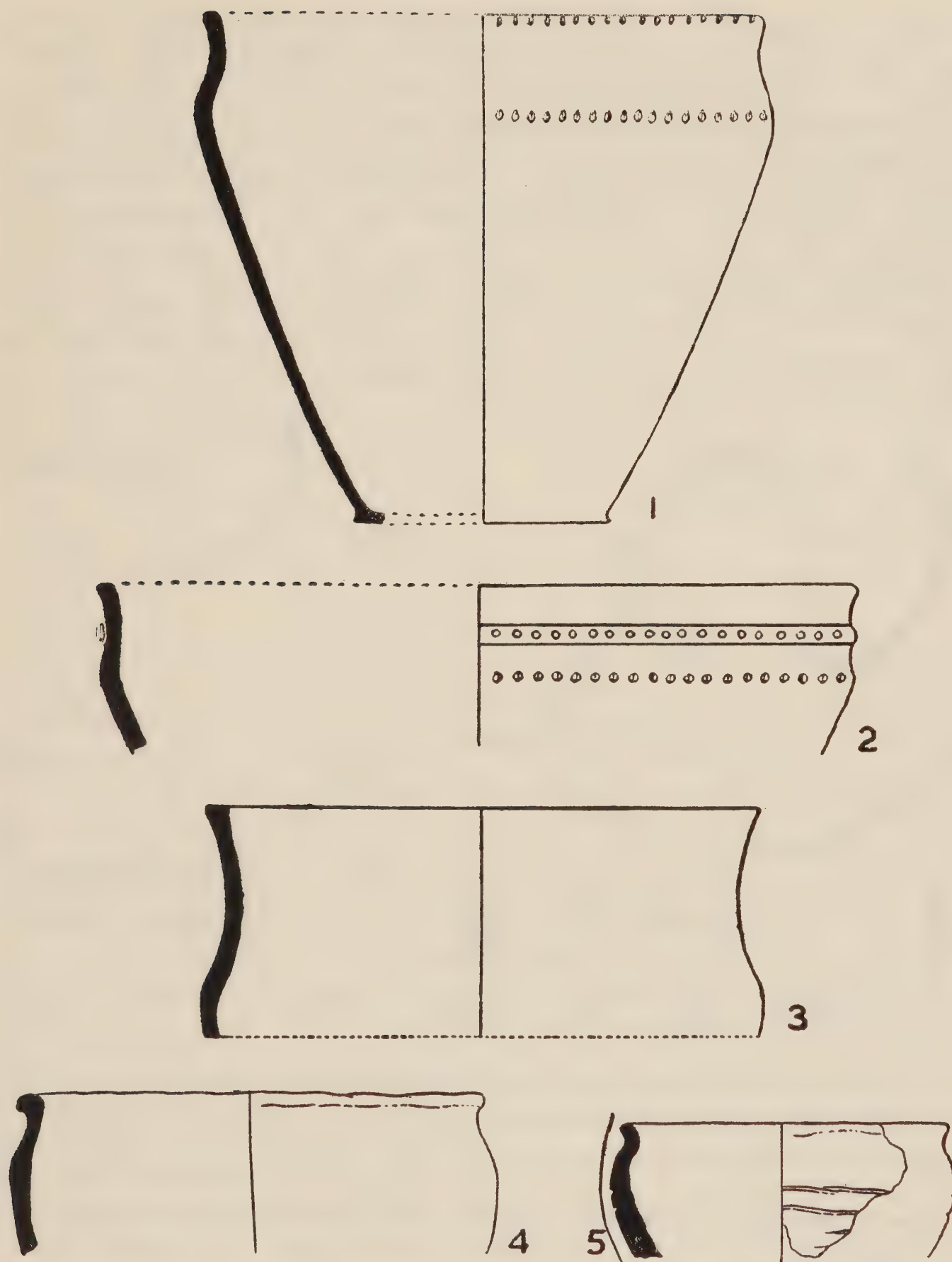


Fig. 9. East Anglia—Wash: *West Harling*: 1, Fig. 8; 2, Fig. 1. *Runcton Holme*: 3, I.A.N.S., Fig. 4, 1; 4, Fig. 1; 5, Fig. 2.

400 B.C. Associated in the same pit⁽²²⁾ were portions of a situlate jar (Fig. 8, 1) of the type discussed above, though without finger-printing, a slightly shouldered "flower-pot-like" or barrel-like jar of Harpstedt antecedents (Fig. 8, 2) (a type which has many descendents in East Anglian pottery), an omphalos base and a fragment, probably of a carinated bowl, with incised linear decoration (Fig. 8, 3). This last type, of which two other early pits produced fragments, is not unlike bowl fragments from the Upper Thames region,⁽²³⁾ and in some of the pits placed early in the series are a number of fragments (*Fengate*, Fig. 2, D1, D2, E1) which may (but not certainly since they are conjecturally restored) resemble the Upper Thames type of situla.⁽²⁴⁾ Such resemblances would not be surprising, since the places of origin on the Continent are in the same general area. At *Fengate* they are, however, associated in the same pits with the typical East Anglian situla, and the type does not seem to survive.

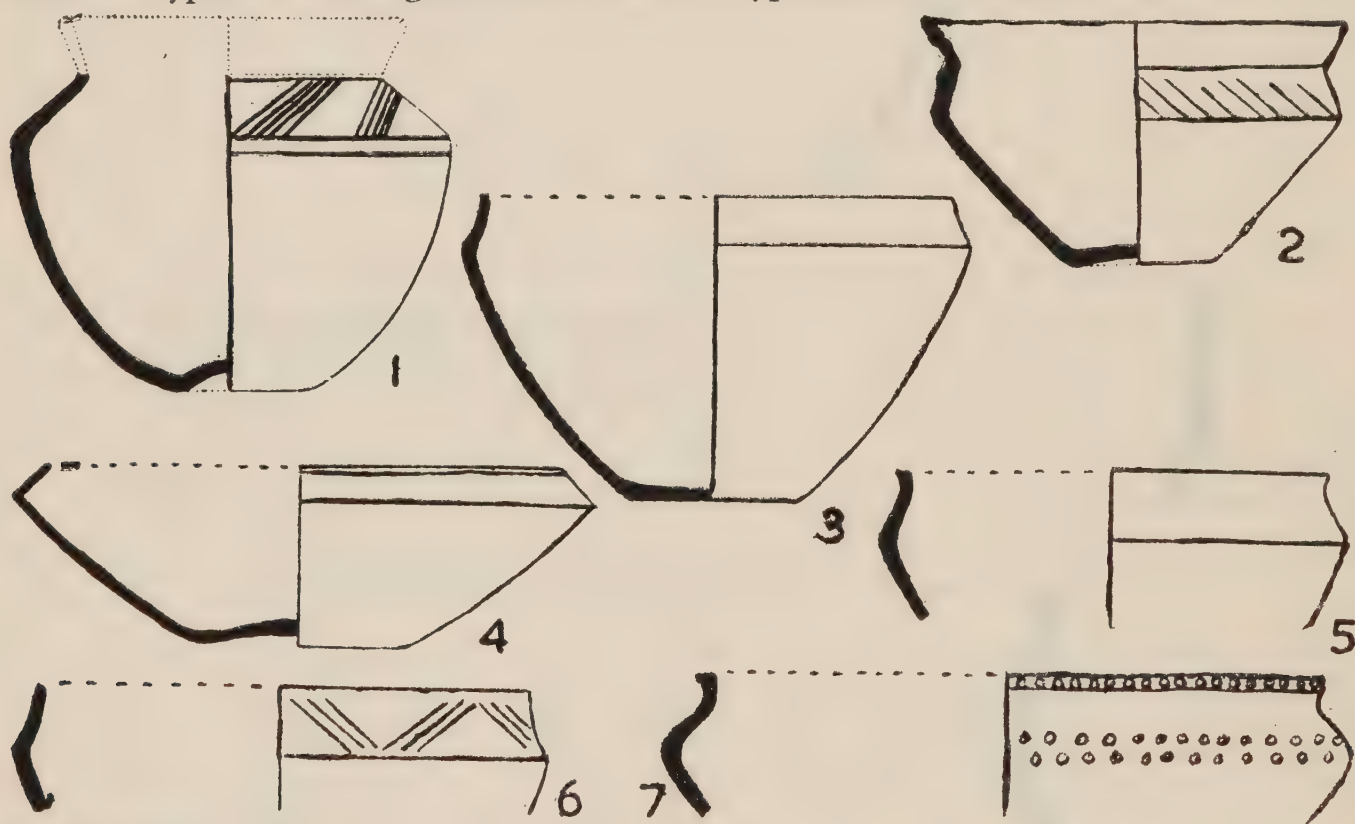


Fig. 10. East Anglia—Wash: *Fengate*: 1, Fig. 2, C1; 2, Fig. 2, B1. *West Harling*: 3, Fig. 36; 4, Fig. 35; 5, Fig. 37; 6, Fig. 41; 7, Fig. 24.

The form of the bowl mentioned above may be that of a deep situlate bowl from Pit C (Fig. 10, 1) with an omphalos base, a type found in the Low Countries (parallels cited in the report) but not certainly elsewhere in Britain. Another type of bowl from an early pit (Fig. 10, 2) has a marked carination and rim flaring to the width of the carination, in this respect resembling the Upper Thames type, from which,

(22) *Fengate*, Fig. 1.

(23) E.g., *Allen's Pit*, Fig. 10, 5, 8, 10, 15.

(24) E.g., *Allen's Pit*, Fig. 8, 3.

however, it differs in the conical shape of the lower part. This again has parallels in the Low Countries, but not in Britain.

There does not, in fact, appear to be a bowl characteristic of the early stages of Iron Age A in East Anglia as a whole. The actual number of bowl fragments on most sites is small and the types, which are mostly close to Continental parallels, various. No developments from these, moreover, can be traced. No type, therefore, seems to become acclimatised. The types in later pits at Fengate are due to various outside influences.

A further form to which attention should be called is a small bucket-shaped vessel with a sharp shoulder, and finger-printing on rim and shoulder (Fig. 11, 1) which has many descendants in later groups.

Another site to which an early date is usually assigned is that of West Harling. Miss Fell and Professor Hawkes suggest⁽²⁵⁾ that this is in fact earlier than Fengate, on the grounds that the pottery shows less influence from the metallic situla, and that there is more use of the plastic applied band. On the other hand, it might be argued that the jars are more rounded and further from the metallic form, while the West Harling bowls (Fig. 10, 4-7) are very angular and suggest La Tène influence. The site can in any case be taken as early in the series, and the initial date not long before or after 400 B.C.

The jar form at West Harling is very typical of the East Anglian group (Fig. 9, 1-2), and a great wealth of this form from the site has been published. Finger-printing is almost invariable, and, as has just been mentioned, a number of examples have an applied plastic band. The continuance of the use of finger-printing on forms of devolved appearance (an appreciable length of occupation is suggested by the amount of pottery, but there is no stratigraphical succession) emphasizes the fact that the presence of this form of decoration does not in East Anglia necessarily imply a very early date, a fact which is confirmed by its occurrence in groups shown by B or C associations to be comparatively late (e.g., *Hunsbury*, Fig. 7, FT1 (here Fig. 11, 7); *Abington Pigotts*, Fig. 2 A (here Fig. 8, 8), and *Fengate*, Fig. 8, J3, T1).

The bowls are of a form not exactly paralleled elsewhere in Britain. They are sharply angular, with wall above carination inclined well in and slightly concave and sometimes a very slightly everted lip. For the most part they seem to be fairly deep, the lower part having a full curve (Fig. 10, 3-6). Only one is decorated. The ware is fine, and a number are burnished. The form suggests contacts with La Tène of the Marne area, though there are no true bead rims (to judge from the report illustrations, but the photograph of a restored vessel in *I.A.N.S.*, Plate III, does look very much like a bead rim).

The development of the Iron Age A 1 into A 2 forms in East Anglia follows the general practice of rounding of angles and general slackening of forms (Fig. 11, 3)

(25) *Fengate*, p. 219.



Fig. 11. East Anglia—Wash: *Fengate*: 1, Fig. 3, F2; 2, Fig. 8, U7; 3, Fig. 6, O3. *Hunsbury*: 4, Fig. 7, CP2; 5, Fig. 7, FT3; 6, Fig. 7, FT4a; 7, Fig. 7, FT1; 8, Fig. 7, D13; 9, Fig. 8, L1; 10, Fig. 7, L7.

though, if the typological sequence suggested at Fengate is correct, the angular forms lasted fairly late (e.g., *Fengate*, Fig. 8, S₃ T₁). Rainbird Clark also classes as A 2 the appearance of pottery with an undecorated dark brown soapy surface.⁽²⁶⁾ It is also marked by a dominance of small barrel-shaped or slightly situlate jars (Fig. 11, 4–8). Such jars mainly develop from small situlate jars as Fengate A₃ and F₂ (here Figs. 8, 2 and 11, 1) for which a Harpstedt ancestry has been suggested. Somewhat similar jars are found in Wessex (*All Cannings Cross*, Plate XXIX, 5–10) and the Upper Thames area (e.g., *Allen's Pit*, Fig. 6, 9), but do not seem to be so common. These small jars are particularly numerous at Hunsbury (Fig. 11, 4–8). Here, unfortunately, excavation was again in the course of commercial exploitation, and there is no record

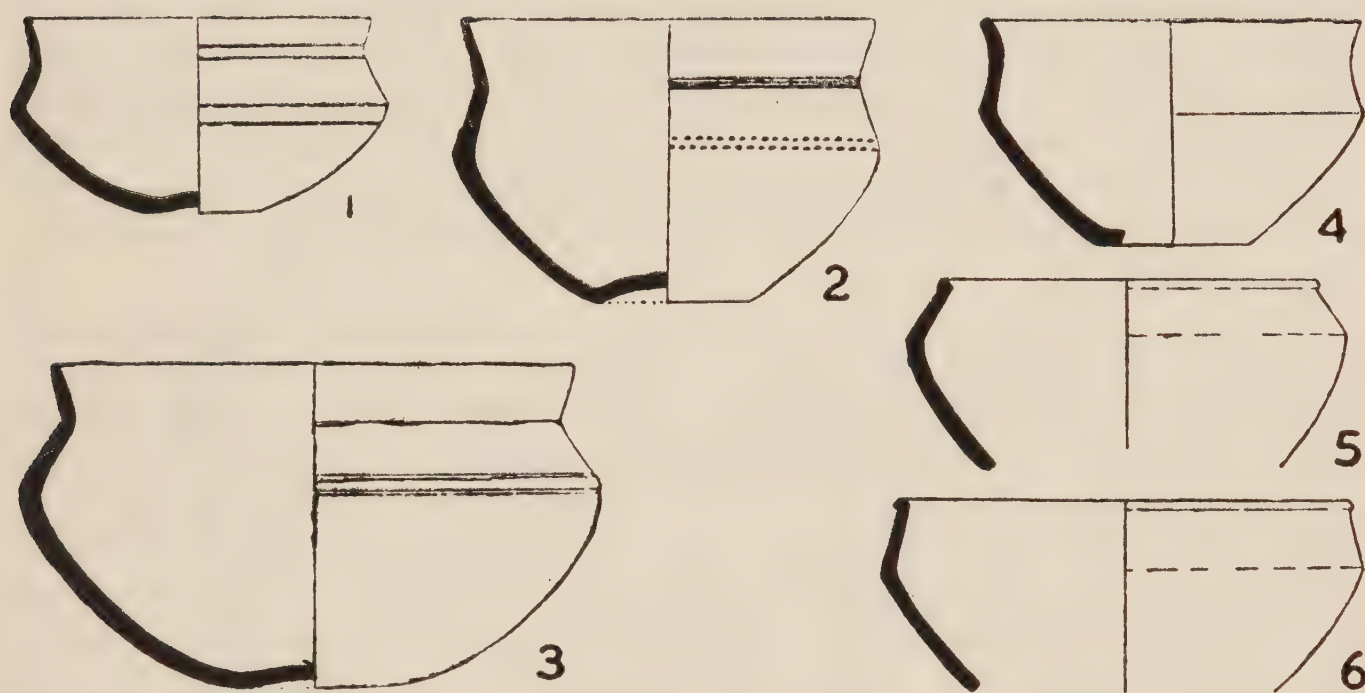


Fig. 12. East Anglia—Wash: *Fengate*: 1, Fig. 5, K₁; 2, Fig. 5, L₁; 3, Fig. 5, M₁; 4, Fig. 6, O₁; 5, Fig. 5, K₄; 6, Fig. 5, K₃.

at all of stratification or association. It is, therefore, not possible to say how much, or if at all, the Iron Age A 2 material antedated the strong B influence shown by the pottery and metal work. In any case, the generally accepted deflation of dates for the beginning of the Iron Age in Britain since the time at which the report was written makes the suggested beginning as early as the fourth century unlikely, for the pottery is very far from the early groups discussed above, while finds of La Tène I objects have been shown to be inconclusive as proof of early dating (see above, p. 30). The Iron Age B pottery is unlikely to be earlier than the first century, lasting down possibly into the first century A.D.⁽²⁷⁾

Another type which appears to be characteristic of East Anglia is a high-shouldered jar, with rounded and short upright neck, and two handles of rounded outline bulging

⁽²⁶⁾ *I.A.N.S.*, p. 26.

⁽²⁷⁾ *Hunsbury*, p. 92.

out of the wall below the shoulder. The grip hole is circular and small in proportion to the size of handle (Fig. 11, 9-10). This type occurs at Hunsbury and Abington Pigotts (*op. cit.*, Fig. 2, 8), and probably at Fengate (*op. cit.*, Fig. 3, C5 and Fig. 5, N7) but, there, no fragments combining rim and handle survive. Somewhat similar handles are found in Wessex (*All Cannings Cross*, Plate XXXVIII, 4, and *Maiden Castle*, Fig. 61, 70) but the form of the vessel is not the same, while in the Upper Thames area only unattached handles survive (*Mount Farm*, Fig. 7, L.19, D.8, B.II.7).

There is thus clear evidence for a separate East Anglian group in the first stages of the Iron Age. At a later stage, however, there is a suggestion of contacts with Wessex, which would obviously be by the chalk ridge linking up with the Chilterns. The connection appears in the middle group of pottery at Fengate, where there are a number of bowls clearly in the Wessex tradition (Fig. 12, 1-3, with which compare Fig. 4, 3) and at Grantchester (compare *All Cannings Cross*, Fig. 7, and Fox, *Archaeology of the Cambridge Region*, Plate XI, A3). The Wessex contact was, however, probably indirect, since there is no trace of the use of haematite in East Anglia. It may even be a case of renewed Continental contacts, as is suggested below in the Caburn I group (p. 55).

This pottery with Wessex affinities at Fengate is contemporary with the appearance of some sharp-shouldered bowls with in-bent wall and a small bead rim (Fig. 12, 5-6) which resemble La Tène Marnian vessels. A bowl with a curved upright wall and sharp carination (Fig. 12, 4) may also have Marnian connections. This type of La Tène connection is discussed in more detail with reference to the South Coast group (p. 56 below). It would, however, appear to be in East Anglia the first appearance of developed La Tène influence, and has been dated *c.* 250 B.C.⁽²⁸⁾ To this same period is probably to be ascribed a burial, with affinities to the Yorkshire Marnian group, at Newnham Croft.⁽²⁹⁾ It cannot be said, however, to inaugurate an AB culture in East Anglia, as has been suggested in the south, for as far as pottery is concerned it does not influence the native ware.

East Anglia itself in fact does not really absorb La Tène influence until the Belgic period, when there is a late flowering of Celtic Art which has been discussed by Rainbird Clark.⁽³⁰⁾ This fact is emphasized by Fox's division of the Iron Age of the Cambridge Region into only two phases, divided at *c.* 50 B.C.,⁽³¹⁾ an arrangement followed by Rainbird Clark.

4. THE SOUTH DOWNS AREA.

Sites.

The Caburn
The Trundle

Open settlement in Iron Age A.
Hill fort.

(28) *Fengate*, p. 221.

(29) *V.C.H. Cambs.*, I, p. 293, Fig. 26.

(30) *I.A.N.S.*, p. 63 ff.

(31) *Archaeology of the Cambridge Region*, p. 72.

THE CHRONOLOGY OF IRON AGE A

Cissbury	Hill fort.
Highdown	Hill fort.
Park Brow	Open settlement.
Findon Park	Open settlement.
Newhaven	Possibly hill fort.
Kingston Buci	Quarry finds—probably open settlement.
St. Catherine's Hill, Winchester	Hill fort.

The archaeological evidence suggests that the part of the south coast of Britain roughly between the River Test and Beachy Head formed in the beginning of the Iron Age a cultural area separate from Wessex on the west and Kent on the east. The Iron Age A pottery does not include the finer wares of the Wessex area, exemplified by All Cannings Cross, and is characterised by strong affinities to the Late Bronze Age wares of the preceding period in Sussex.

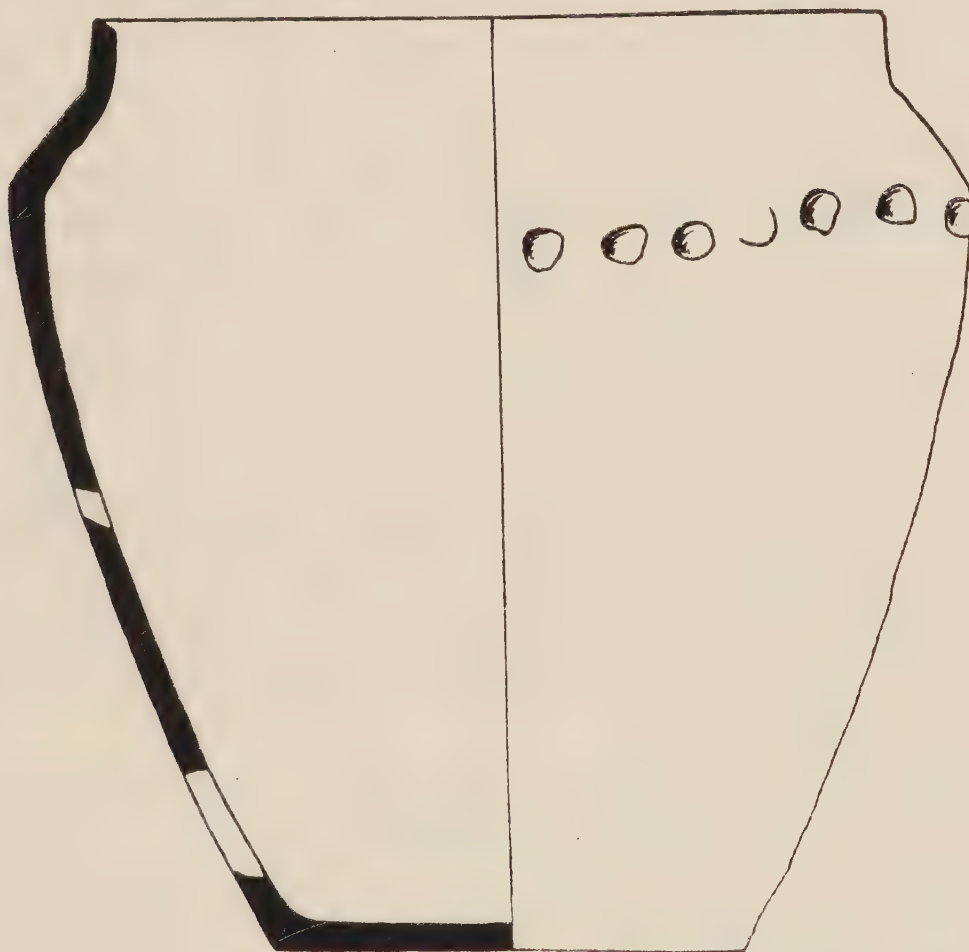


Fig. 13. South Downs : *Park Brow* : *Arch.*, 76, Fig. 4.

Professor Hawkes has shown⁽³²⁾ how the Late Bronze Age population of the South Downs was built up by a series of groups migrating from the Continent, and mingling

(32) *P.P.S.*, I, Plumpton Plain Report.

with surviving Middle Bronze elements. Though the cause of these migrations was the expansion in Central Europe of Hallstatt groups already themselves iron-using, the immigrants to Britain were still culturally in the Bronze Age. There may, however, have been, in Sussex, an exception to this, for at Eastbourne has been found⁽³³⁾ a small group of pottery with clear affinities to Reinecke's Hallstatt C pottery of south-west Germany. But this group cannot be taken as inaugurating the Iron Age for the area. The lowest date now suggested for Hallstatt C, 640-500 B.C.,⁽³⁴⁾ is appreciably too early for other Iron Age remains in this country, and there is no line of descent from this type of pottery here. It must be taken as the relics of an isolated immigrant group, quickly exterminated or absorbed.

The pottery belonging to the earliest stages of the Iron Age in this area is in fact that of the Late Bronze Age peoples of Northern France and the Low Countries, influenced by the Hallstatt bronze situla. In this, the pottery of the South Downs area has of course much in common with the Wessex area, where the situla form has a similar origin, and the vessels of this type from the two areas are in fact very similar (Fig. 13). A great number of the Sussex examples, however, show a thickening of the rim with finger-tip "cabling" on it (Fig. 15, 1) and a similar cabling on the shoulder, which is a considerably more prominent characteristic here than in Wessex and is, of course, a Bronze Age survival. Other situlae forms show in their rounded shoulders the influence of the Hallstatt ceramic situla, and are thus a stage further removed from the metal situla (Fig. 14, 1-2). The rounded shoulder distinguishes this group clearly from the situlae with similar flaring rims of other regions (e.g., Fig. 5, 1-2). The pottery of the South Downs area is, moreover, distinct in the lack of the bowl forms of metallic ancestry of the Wessex area, and though haematite-coating occurs on a few vessels, it seems soon to have died out.

The earliest pottery of the Iron Age thus suggests that its users were groups more firmly rooted in the Bronze Age than those of Wessex, with considerably less contact with the transitional Hallstatt-La-Tène peoples than the immigrants into Wessex. It may thus well be that many of the groups crossed the channel earlier than those who brought the All Cannings Cross type of pottery, and the process may have been going on for much of the fifth century B.C.

The amount of pottery belonging to this phase is considerable and occurs on numerous sites, though surprisingly few of the sherds from any site can be reconstructed into complete vessels. It would appear that it continued for an appreciable length of time and that the population was fairly dense. But little estimate can be made of the length of time, particularly since the lack of sufficient complete forms prevents even an estimate of typological evolution.

Within the phase of Iron Age A, however, other developments can be recognised.

(33) *Ant. J.*, II, "Hallstatt Pottery from Eastbourne."

(34) Hawkes, *P.P.S.*, XIV.

THE CHRONOLOGY OF IRON AGE A

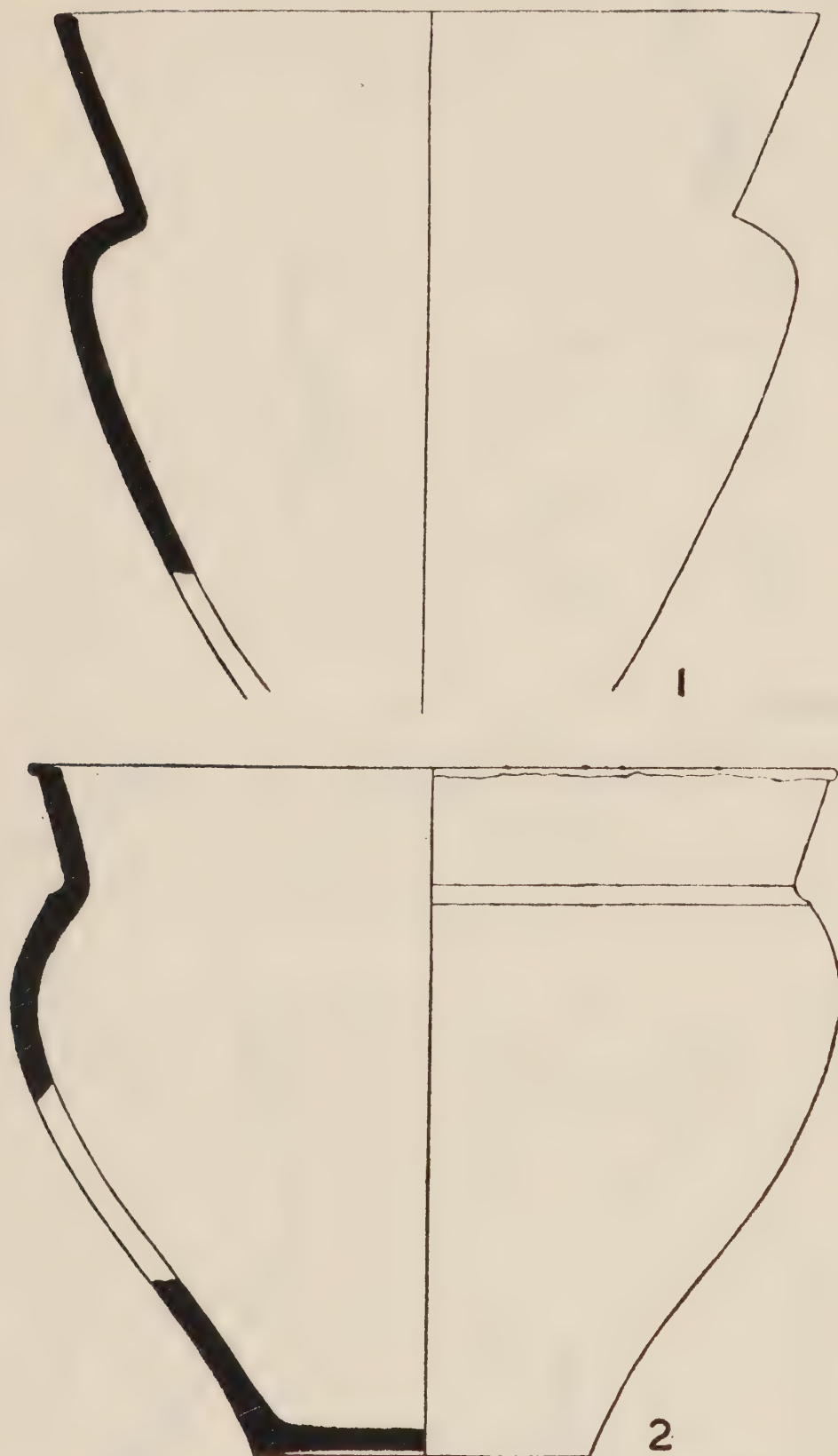


Fig. 14. South Downs : *Park Brow* : 1, *Arch.*, 76, Fig. 5 ; 2, *Arch.* 76, Fig. 6.

Probably the earliest of these is the appearance at the Caburn of a variant of Iron Age A pottery to which Professor Hawkes⁽³⁵⁾ has given the name "Caburn I." It is character-

(35) *Sussex Arch. Coll.*, LXXX, "The Caburn Pottery and its Implications."

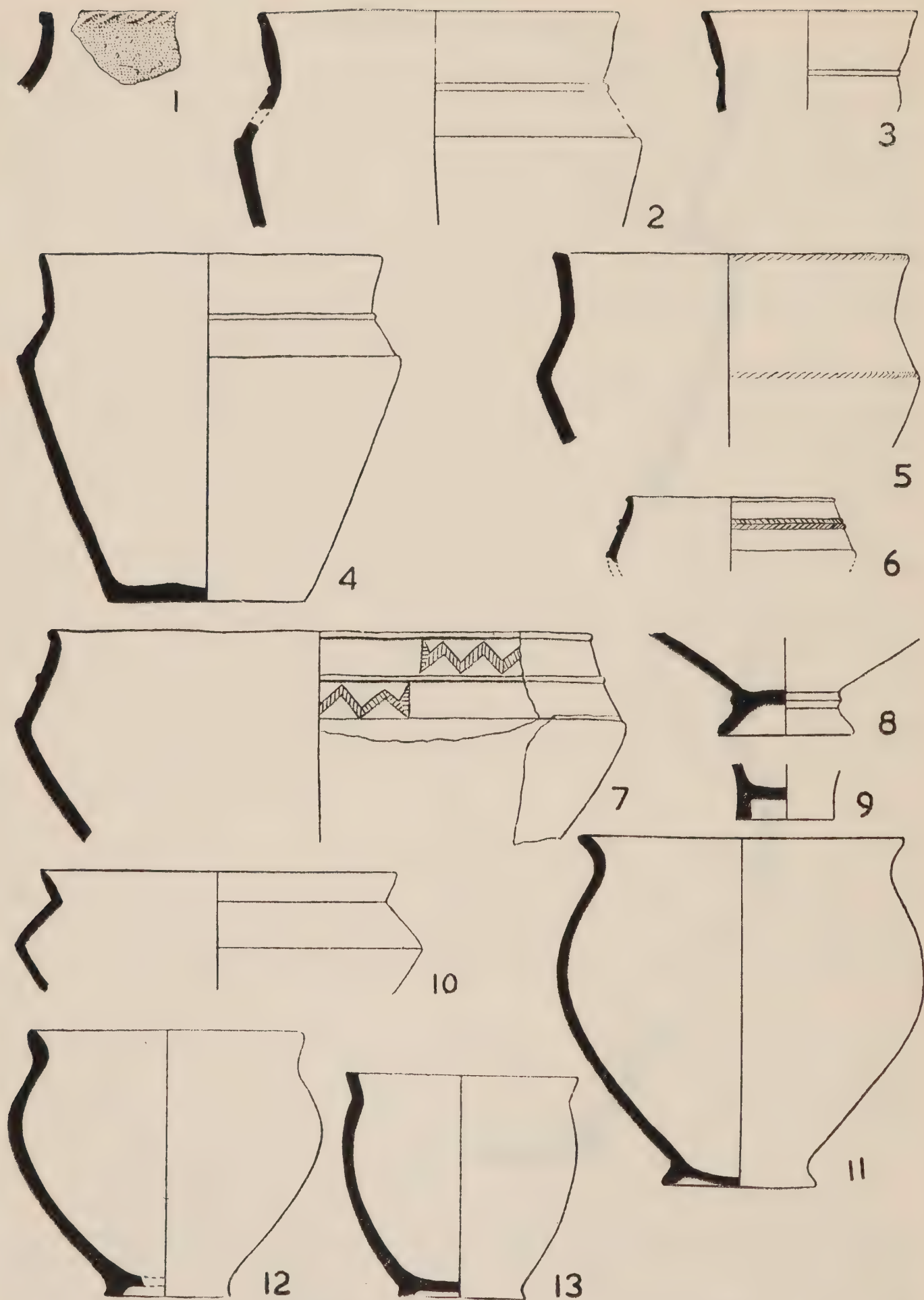


Fig. 15. South Downs : *The Trundle* : 1, Pl. XI, 130. *The Caburn* : 2, Fig. A1 ; 3, Fig. A5 ; 4, Fig. B7 ; 5, Pl. X, 73 ; 6, Pl. X, 74 ; 7, Pl. X, 72. *Park Brow* : 8, *Caburn*, Fig. G2 ; 9, *Caburn*, Fig. G3 ; 10, *Caburn*, Fig. G1 ; *Caburn* : 11, Fig. J59. *Findon Park* : 12, *Arch.*, 76, Fig. 11 ; 13, *Arch.*, 76, Fig. 12.

ised by vessels in fine hard reddish-brown ware with sharp metallic angles ; the use of cordons on the neck, and frequently offsets or grooves at the angles (Fig. 15, 2-4). There is also a coarse ware in which the typically Iron Age A slashed bands on rim and shoulder appear in a finer and flatter technique. Professor Hawkes has stressed the affinities of the finer wares to those of Wessex, especially to the cordoned vessels of All Cannings Cross and Meon Hill.⁽³⁶⁾ The resemblance is clear, but it must be noted that the sharp-angled situla with flaring rim does not appear on these sites. He also compares a very fine bead rim situla (Fig. 15, 7), with a haematite slip and notched zigzag decoration filled with white inlay, with the similar Wessex technique, though the report does not mention whether the decoration on the Caburn example is, as in Wessex, incised after firing. But the form of the vessel, duplicated by another of the same group (Fig. 15, 6) does not appear on the Wessex sites, and is, in fact, exactly that of the La Tène pottery situlae figured by Dr. Wheeler in the Maiden Castle Report.⁽³⁷⁾ Hengistbury Head, Class C, provides much the best parallels in Britain. This vessel was apparently the only example of the use of haematite, though other vessels have a smooth clay slip, possibly imitating it. This is in strong contrast to its frequency in Wessex.

This type of pottery occurs in profusion only at the Caburn, with a few isolated sherds on other sites.⁽³⁸⁾ Professor Hawkes has recognised the difficulties of bringing its bearers from Wessex to a site in East Sussex, when it is not found in the intervening area of West and Central Sussex. He suggests that this is to be accounted for by an invasion into the latter area of warriors from the Marne, some fifty years later, which cut off Sussex from further contacts with Wessex, and left the Caburn I group to develop in isolation.

That there were disturbances affecting the south coast during the third century can be deduced from the evidence for a great wave of hill-fort building midway in the Iron Age A phase, though there is no internal evidence on these sites to fix the date closely. But it does not seem necessary to use these disturbances to explain the phenomenon of the isolation of Caburn I. It would seem much more probable that the relationship of Caburn I to Wessex A is collateral rather than a direct descent. Both are the result of the impact on rather backward Hallstatt peoples of transitional or full La Tène groups, and the Caburn I pottery suggests an impact at a later date, when the pottery copies of the bead-rim bronze situla were in vogue. The use of cordons and the rare use of haematite only prove a common metallic ancestry.

It is therefore here suggested that the Caburn I people represent a separate migration from the Continent, from a source akin to that of the Wessex A people, but at a somewhat later date when La Tène influence had developed further. It

(36) *Proc. Hants. Field Club*, XIII.

(37) *M.C.*, Fig. 62.

(38) *Sussex Arch. Coll.*, LXXXVII, p. 93. (Some of the parallels seem rather doubtful.)

remains possible, however, that the further spread of this group was prevented by these disturbances, and that its arrival might be placed in the neighbourhood of 300 B.C., which is the date given to it by Professor Hawkes on the grounds of its similarity to the developed phase of Wessex Iron Age A.

The building of hill-forts already referred to must come soon after this phase, though in themselves they do not supply exact dating evidence. It is clear this took place in a time of danger. In the same article on the Caburn pottery, Professor Hawkes suggests the cause of danger was the invasion of groups of La Tène warriors displaced on the Marne round about 250 B.C. The principal evidence for the course of events he deduces from the site of Park Brow, near Cissbury. Here there are two sites, the earlier, Park Brow I, on the summit, while Park Brow II is lower down the hill. Park Brow I was an Iron Age A site, and examples of its pottery are illustrated in Figs. 13 and 14. But on it occur also a few specimens of a very different type of pottery, including pedestal bases (Fig. 15, 8-9), in which Mr. Reginald Smith recognised a close affinity to vessels from La Tène sites on the Marne. Another find suggesting La Tène influence was a bent silver ring classified as La Tène Ic, and dated in Switzerland to 325 to 250 B.C.

Very similar pottery has been found at Worth, near Sandwich in Kent,⁽³⁹⁾ which must have come from a similar source. The arrival of some foreign groups is certainly suggested. But it may be doubted whether the pedestal bases found at Fifield Bavant and Swallowcliffe Down⁽⁴⁰⁾ should be given sufficient weight to indicate that similar groups penetrated into Wiltshire. Individual pedestal bases occur throughout the A levels at Maiden Castle,⁽⁴¹⁾ and only prove the contemporaneity and slight contacts of our A with La Tène I, already well-known from the brooches.

These Park Brow and Worth groups of pottery certainly suggest that continental groups were on the move, for which events on the Marne about 250 B.C. provide an adequate context. It is very reasonable to suppose that these movements were the cause of the hurried hill-fort building in which the hitherto peaceable A-folk now engaged. But it may be doubted whether we should see in this movement a full-scale invasion by Marnian warriors from the heart of the La Tène area. The evidence of this from Southern Britain is too slight, and too much in contrast with the position in Yorkshire, where there are undoubted relics of Marnian warriors. The same groups can hardly have landed in Sussex and Kent, leaving only pottery behind them and then drawn away northwards (Professor Hawkes' expression), omitting to be buried on the way, arrived in Yorkshire to resume their chariot burials but forget their pottery.

It seems much easier to explain the evidence on the south coast as merely an accentuation of a process which was probably never entirely suspended, in which

(39) *Ant. J.*, VIII, p. 81 ff.

(40) *Wilts. Arch. Mag.*, XLII, pl. VII and XLIII, pl. IV.

(41) *M.C.*, p. 203, Fig. 60.

groups of the peoples of Northern France and the Low Countries crossed over to Britain, bringing with them their basically Hallstatt culture, increasingly influenced by La Tène. The continuance of contacts with the Continent during the A phase in Britain is shown by the occurrence here of La Tène I brooches of types later than those current when the first Iron Age A groups must have migrated. The degree of influence would no doubt depend on the place of origin. Some of the pottery of the Park Brow I and Worth groups was very close to Marnian La Tène, and their place of origin must have been in that direction. But it would be very much easier to explain the magnitude of the apparent political disturbances as compared to the small amount of evidence of new types of pottery so far available if some of the newcomers came from further distant areas and brought pottery related to the existing developed Iron Age A types, which has not for that reason been recognised.

A minimising of the La Tène elements introduced in the mid-third century would help to explain some difficulties with reference to the next stage in Sussex. Park Brow I was apparently abandoned by about the middle of the third century, and Park Brow II at the foot of the hill is a later settlement. Professor Hawkes considers that II immediately succeeds I, on the grounds that the pottery of II and of the neighbouring site of Findon Park, which is equated with it, includes pedestal bases "just a stage beyond" those of Park Brow I. But in point of fact all except one of the bases in question are very much more devolved than those of Park Brow I, and the typical form produced is the jar with the gentle S-profile, and footring (Fig. 15, 12-13) which Mr. J. B. Ward Perkins has shown in the Oldbury Report⁽⁴²⁾ to be typical of the Wealden culture. Herein lies the difficulty, for Mr. Ward Perkins has shown that the Wealden culture is unlikely to be dated before 100 B.C., and the example from Oldbury (Fig. 21, 6), which is here probably to be dated within the first century A.D.,⁽⁴³⁾ is so close to those from Findon Park that it cannot possibly be separated from them by some two hundred years of development. It may be remarked that an initial date as high as 100 B.C. was merely suggested in order to narrow as far as possible the gap between Professor Hawkes' proposed origin and that of the known fixed points. It is therefore suggested that a later date should be given to Park Brow II and Findon Park. That the Late Tène Ic iron brooch cannot be used as evidence of a third century date has now been shown (see p. 30 (6)), in spite of the fact that in its Continental home it is contemporary with the bent silver ring found at Park Brow I, for which the fragility and rareness make a long survival improbable. A later date is suggested by the very close resemblance of this material to that from Caburn II, which Professor Hawkes has shown⁽⁴⁴⁾ to be not earlier than 100 B.C. and to have lasted down to A.D. 43. It is true that a succession of pits at Findon Park⁽⁴⁵⁾ showed some typological development,

(42) *Arch.*, 90.

(43) *Ibid.*, p. 153.

(44) *Op. cit.*, p. 249.

(45) *Ant. J.*, VIII.

but it seems unlikely to extend over some 150 years, or 300 if one takes it down to the well-fixed terminal date for Caburn II. A footring vessel from Caburn II is here illustrated for comparison (Fig. 15, 11), but not the rest of the pottery, which is purely La Tène and falls outside the scope of this survey.

Findon Park, Park Brow II and Caburn II are in fact characterised by an entirely new repertoire of forms, many decorated with La Tène curvilinear motives, comparable but not identical with those found at Glastonbury. Wherever such a class of pottery can be soundly dated, for instance at Maiden Castle, in Mr. Ward Perkins' South-Eastern B⁽⁴⁶⁾ and probably at Glastonbury, it can be shown to have been introduced by immigrant groups in the first century B.C., probably set on the move by Roman expansion. The pottery found on Sussex sites such as those mentioned can be best explained as belonging to another group of people who might be called Sussex B, and distinguished especially by the saucepan type of vessel. That this vessel need not have been introduced by the third century incursion, in spite of the fact it was a type current on the Marne at that time, is shown by its popularity at Glastonbury; it must therefore have been still in use in the homeland of these people at a much later date. The La Tène decorative motives would then have been introduced into Sussex in the first century B.C., instead of in the third century on metal-work, leather and so on, to lie dormant for a hundred and fifty years before appearing on pottery. The footring vessel itself, which appears on the sites under discussion, belongs more properly to the Wealden culture, extending to the North Downs, and would be the influence of new La Tène ceramic fashions on the surviving Iron Age A.

It is therefore suggested that in the South Downs area, as in Wessex, Iron Age A lasted down, without any supervening AB or Cissbury culture, until the first century B.C. There is plenty of apparently degenerate Iron Age A material to cover the period and a good illustration is the latest material from Caburn I, beneath the Caburn II rampart.⁽⁴⁷⁾ A late appearance of A characteristics with slashed plastic bands applied to Iron Age B wares, is in fact pointed out by Professor Hawkes,⁽⁴⁸⁾ who suggests that it may be due to Caburn I people displaced by the Caburn II folk and settling in the surrounding countryside. An easier explanation is that it represents the general continuation of Iron Age A traditions until the first century B.C.

5. THE THAMES ESTUARY AND THE LOWER THAMES VALLEY.

The area here considered covers the Kent and Essex shores of the Thames Estuary and the country bordering the Thames up as far as the River Wey. Thus the ridge of the North Downs where it runs parallel to the Thames is included. Though,

(46) *P.P.S.*, IV, Crayford.

(47) *Op. cit.*, Fig. 1.

(48) *Sussex Arch. Coll.*, LXXX, p. 279.

THE CHRONOLOGY OF IRON AGE A

as will be seen, different portions of the area appear to be affected by different influences, there seems to be an underlying unity.

Sites.

Surrey

Sandown Park, Esher	Occupation site.
Wisley	Occupation site.
Caesar's Camp, Wimbledon	Hill fort.
Epsom	Pit.
West Clandon	Pit.
Leigh Hill, Cobham	Occupation site.
St. Catherine's Hill, Guildford	Stray finds.
St. Martha's Hill, Guildford	Oven.
Carshalton	Fortified settlement.

Kent

Hulbury	Hill fort.
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Essex

Danbury	Gravel pit finds. Probably occupation site.
Great Bromley	Chance finds. Probably occupation site.

There is no published evidence of any early A sites in this area. The earliest site is possibly that of Sandown Park, Esher. For the group of pottery from this site, Mr. Frere has suggested a mid-third-century date and a predominant, though not direct, Wessex influence. The extent of this may, however, be doubted. Mr. Frere has, in fact, emphasized the absence of many Wessex characteristics, and the parallels for those he claims as present do not seem entirely convincing, or at least do not represent characteristics exclusive to Wessex. Omphalos bases, for instance, are found in the East Anglian group, while stroke-filled triangles, though found in Wessex, are rare there. There are, in fact, no examples of the forms described above (p. 34) as typical of Wessex. On the other hand, the comparisons he makes with Fengate examples seem to be good, especially that of the bowl (Fig. 16, 3) and the jar (Fig. 16, 5). Moreover, the jar (Fig. 16, 1) might well be the East Anglian type, since the restoration of the shoulder which gives it the appearance of the Upper Thames type, is conjectural only. There are also similarities to Fengate in the appearance of vessels of the types which, at Worth, Professor Hawkes recognised to have Marnian affinities (Fig. 16, 2 and 4). It is on this basis that Mr. Frere suggests a mid-third century date for the site. The connections with Fengate thus appear to be stronger than those with Wessex, and it may be suggested that this group reached Surrey up the Thames, from a source similar to that of the East Anglian group. It would seem to be not at all impossible that the Marnian elements were acquired from La Tène influence on the Continent, but there is no proof one way or the other. There must,

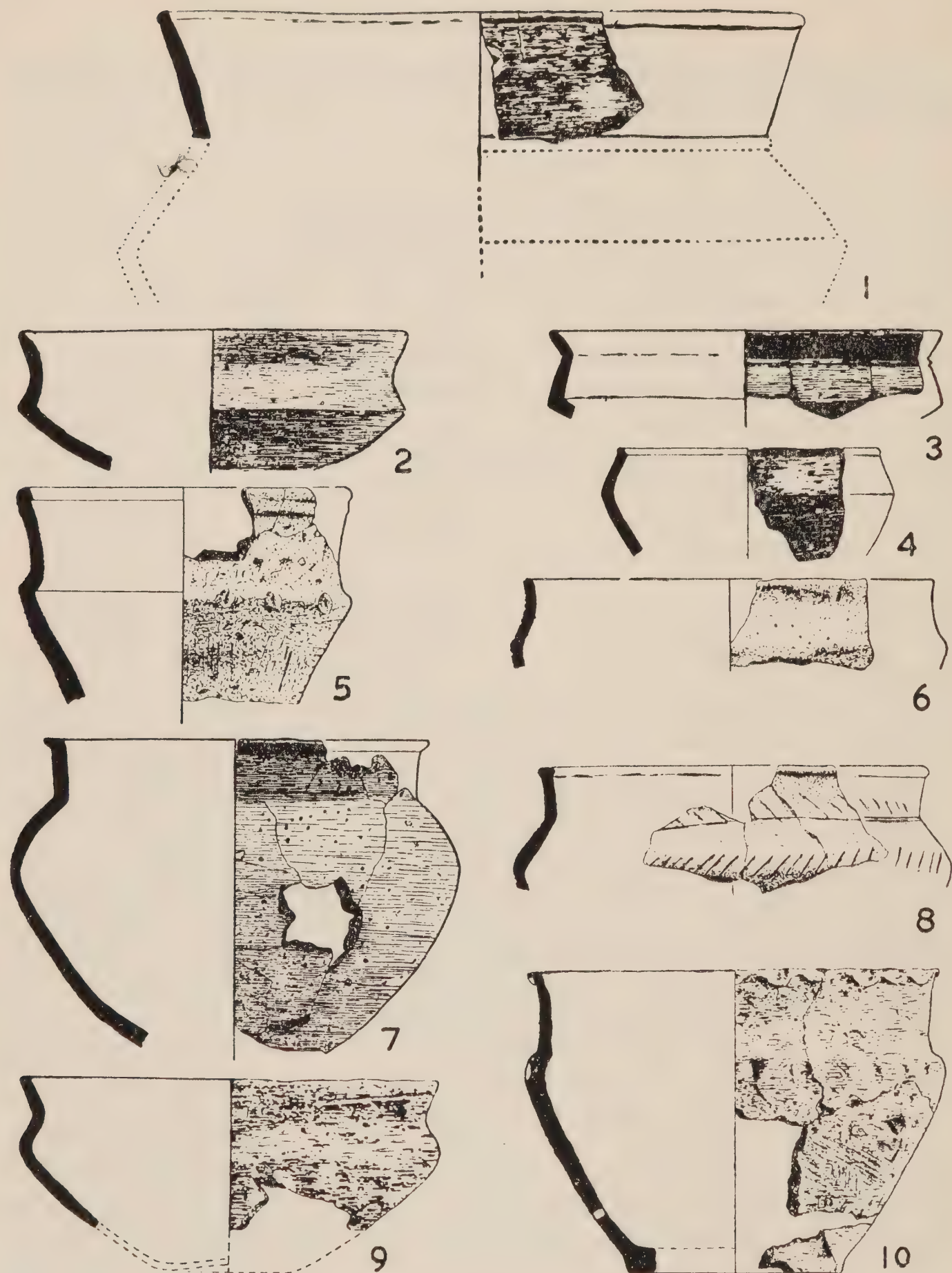


Fig. 16. Lower Thames: *Esber*: 1, Fig. 16, 2; 2, Fig. 16, 1; 3, Fig. 16, 4; 4, Fig. 16, 6; 5, Fig. 19, 43; 6, Fig. 17, 23; 7, Fig. 18, 29; 8, Fig. 17, 17. *Caesar's Camp*: 9, Fig. 3, A5; 10, Fig. 3, A1.

however, have been some slight contact with Wessex, since two sherds of haematite-coated ware were found. Such a contact at this stage is quite possible, since the contemporary Fengate group shows the spread of Wessex influence.

An example at Esher of what appears to be the characteristic situla form of this region, which has a high shoulder, a fairly high straight neck, often with a thickened or out-turned rim and with finger-printing on rim and shoulder, is shown on Fig. 16, 5, though another example on the figure from Caesar's Camp, Wimbledon, is more typical (Fig. 16, 10). This is not unlike the East Anglian example, with its high shoulder and addiction to finger-printing. It seems to differ from the majority of East Anglian examples in form only in the fact that the curve of the neck above the carinated shoulder is concave rather than angular. In East Anglia, however, this type of neck is represented at Abington Pigotts (Fig. 8, 8). Also, in the majority of examples in the Lower Thames group, the decoration is with full finger-tip, while in East Anglia, fingernail impressions are more popular. The prevalence of finger-printing is, however, as marked as in East Anglia, as Mr. Ward Perkins showed in his discussion of the Iron Age cultures of Kent.⁽⁴⁹⁾ Other examples of this type of jar are figured from Caesar's Camp, Wimbledon, Leigh Hill, Cobham and Wisley (Surrey), and Hulbury (Kent) (Figs. 16, 10; 17, 1, 3; 21, 1).

Associated with the Caesar's Camp and Cobham groups are bowls for which Marnian affinities have been claimed, which also occur at St. Catherine's Hill, Guildford. On these grounds, these groups have been dated to the second half of the third century B.C. Of two vessels from St. Martha's Hill, Guildford, one is a jar of the regional type (Fig. 17, 7), the other is a bowl which may be connected with the Park Brow degenerate pedestal or footring vessel which is discussed on p. 57. If the first development of these vessels is accepted as beginning in the third century, this would accord with this suggested dating. There are, however, difficulties in this which cannot at present be resolved. These are especially presented by the Hulbury group to which reference has already been made above, which came from a number of pits, presumably but not certainly contemporary, from the site of a destroyed earthwork in the Darenth Valley. The group includes a number of jars (Fig. 21, 1-3) of forms typologically at least as early as those associated with the pottery for which Marnian affinities are claimed in Surrey, but also a footring bowl of typical Wealden-culture form (Fig. 21, 5) and a small omphalos-base bowl (Fig. 21, 4). The Hulbury footring bowl is almost identical with (and typologically later rather than earlier than) a similar vessel associated with the construction of the primary defences at Oldbury, which have been shown by Mr. Ward Perkins⁽⁵⁰⁾ to have been erected not very long before the Roman Conquest in A.D. 43, probably in face of Belgic expansion into West Kent under Cunobelin, that is to say, no earlier than the first century A.D. Moreover, the

(49) Oldbury Report, *Archaeologia*, 90, p. 170 ff.

(50) Oldbury Report, pp. 142-43 and 158.

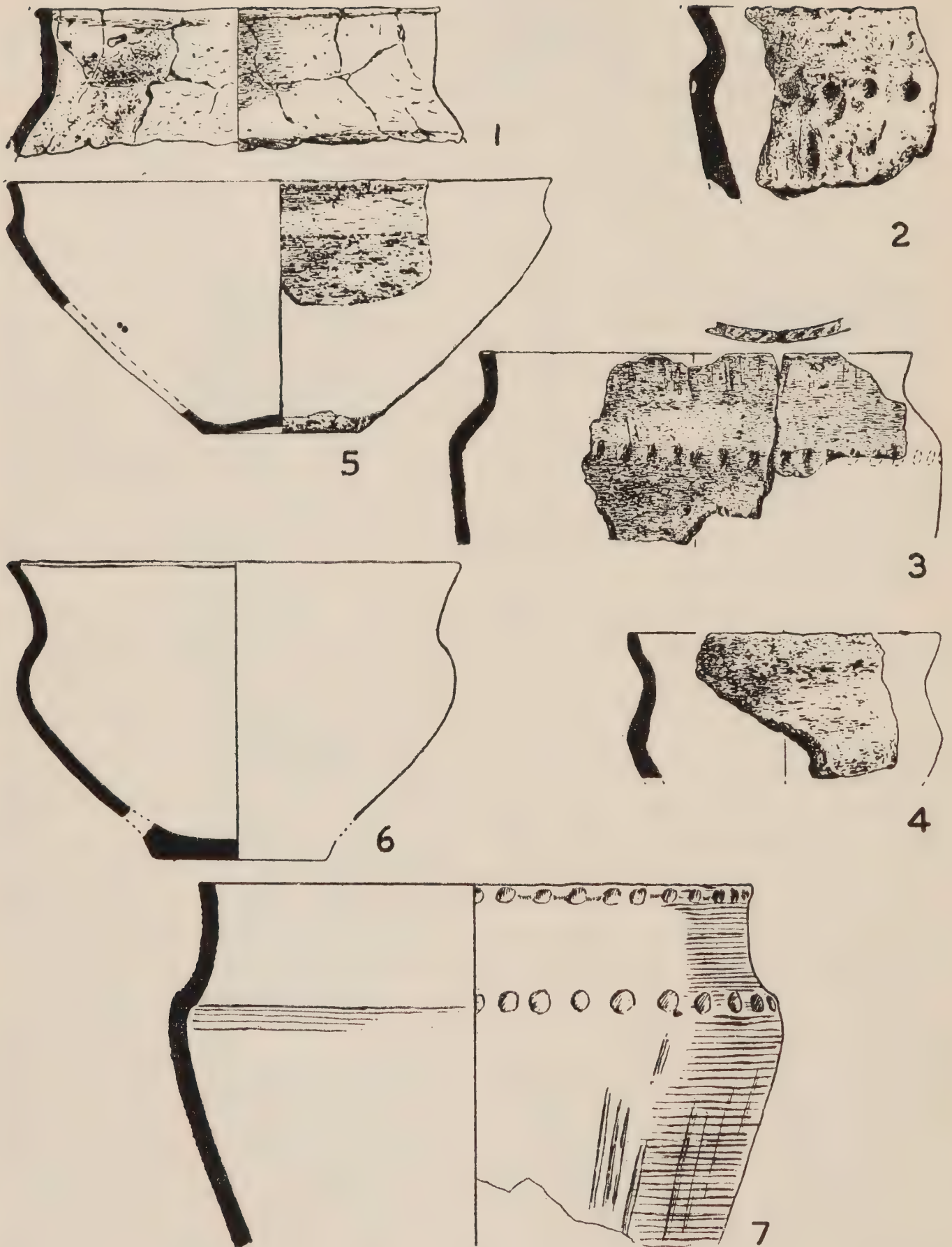


Fig. 17. Lower Thames : *Cobham* (in Caesar's Camp) : 1, Fig. 4, B7 ; 2, Fig. 4, B3 ; 3, Fig. 4, B1 ; 4, Fig. 4, B8. *St. Catherine's Hill, Guildford* (in Caesar's Camp) : 5, Fig. 4, K1. *St. Martha's Hill, Guildford* : 6, Fig. 1 ; 7, Fig. 2.

small omphalos bowl is exactly similar to one from West Clandon, Surrey, where it is ascribed on the strength of the omphalos base to the South Eastern B culture and therefore to be at least as late as the late first century B.C., though it must be admitted that it differs considerably from the typical omphalos bowl of this culture. The problem of reconciling these factors must be left there for the moment, until more dating evidence is available, but it must at least be noted that good situlate forms

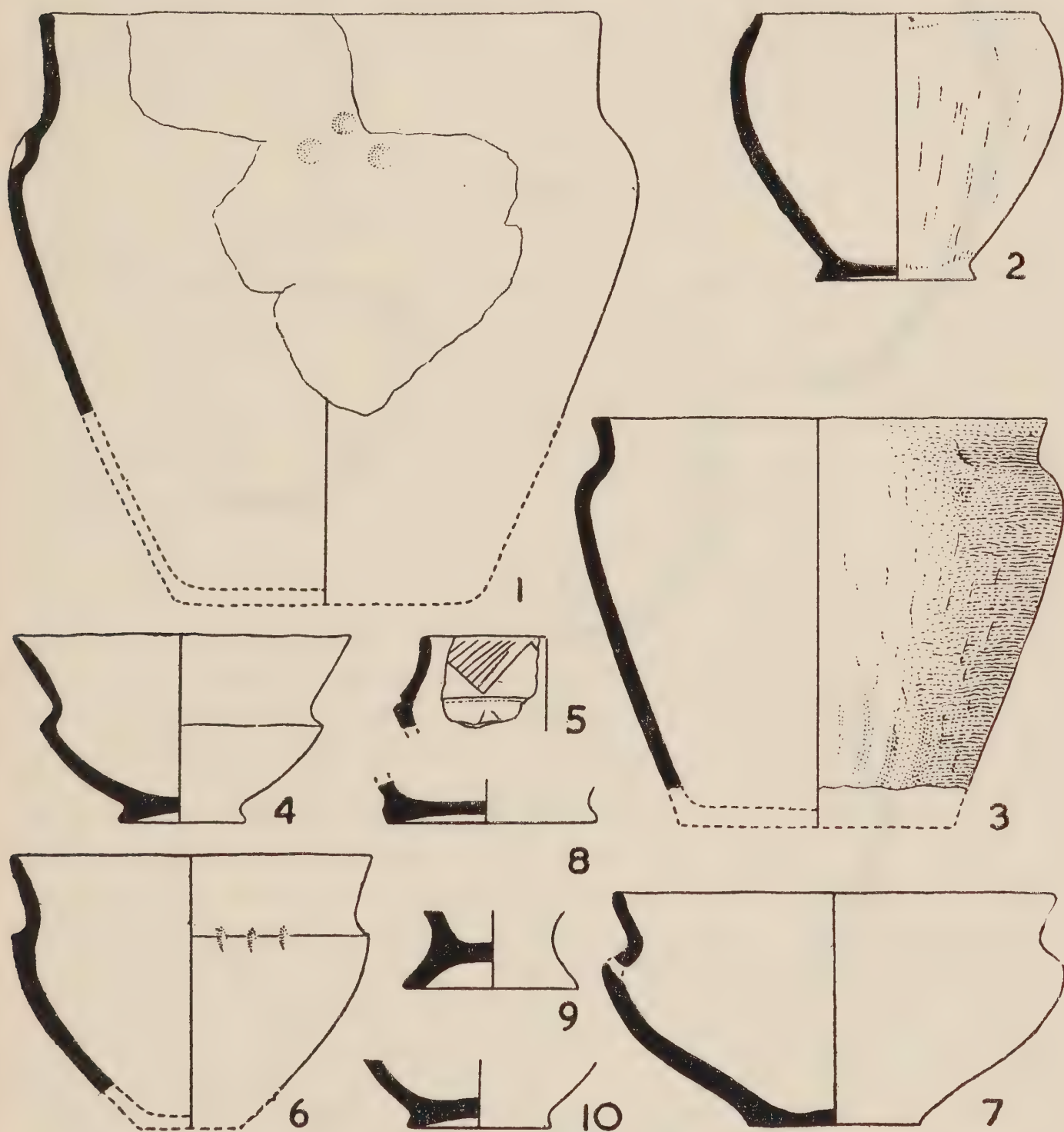


Fig. 18. Lower Thames: *Wisley*: 1, Fig. 4, I4; 2, Fig. 1, I1; 3, Fig. 4, I54; 4, Fig. 1, I10; 5, Fig. 2, I20; 6, Fig. 1, I9; 7, Fig. 1, I8; 8, Fig. 3, I52; 9, Fig. 2, I18; 10, Fig. 2, I19.

with finger-printing cannot be taken without reserve as evidence of early dating in this area.

A group containing pottery of comparatively early appearance and of character somewhat exotic to the region is that from Wisley, on the River Wey, unfortunately from inadequately recorded excavations so that the closeness of the association is

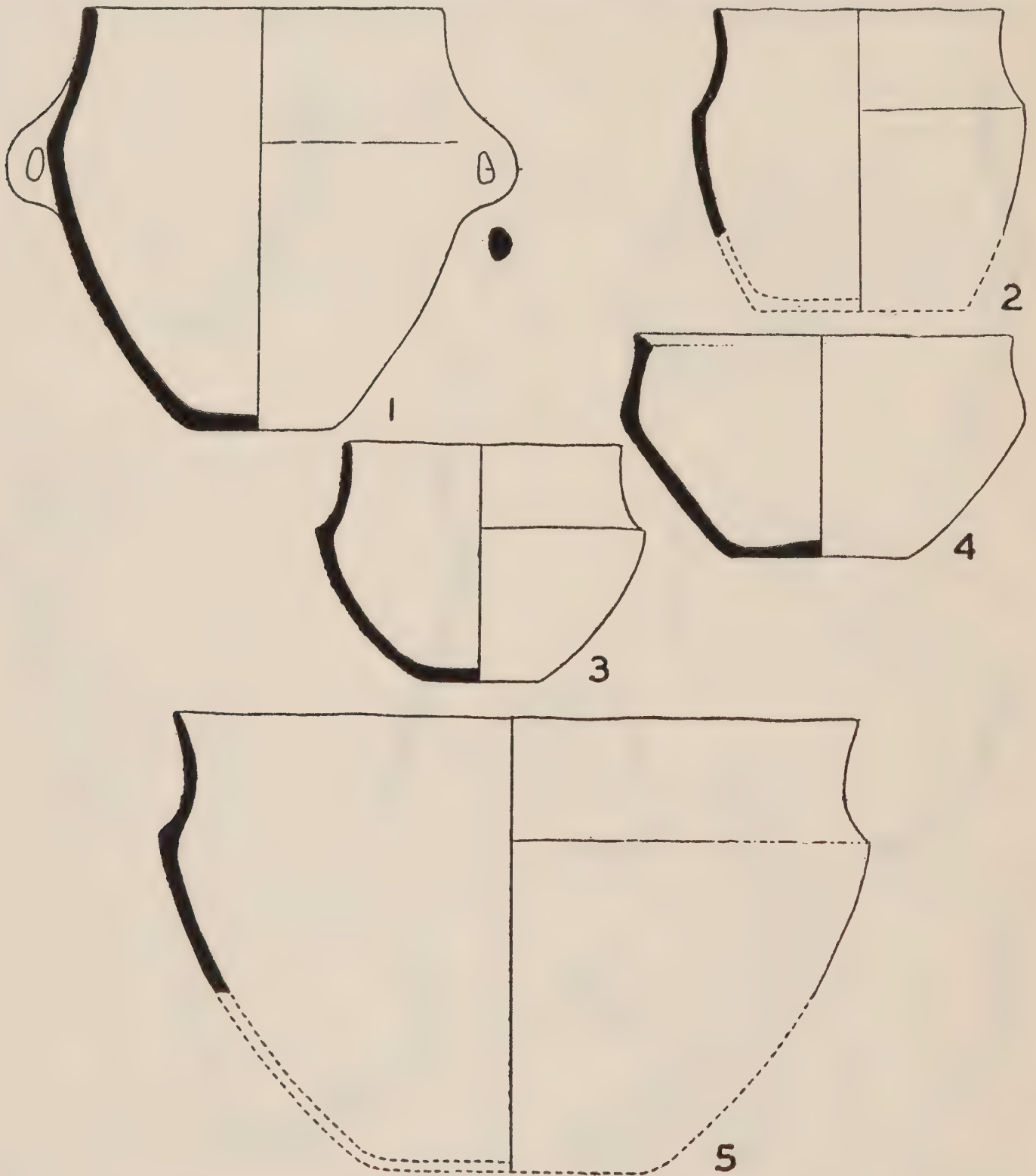


Fig. 19. Lower Thames : *Carshalton* : 1, Fig. 4, C1 ; 2, Fig. 5, C4 ; 3, Fig. 5, C3 ; 4, Fig. 4, C2 ; 5, Fig. 6, C5.

dubious. Some jars (e.g., Fig. 18, 3) are of the general regional type, but the carinated bowls, though of the general Iron Age A form, are not paralleled elsewhere in the region, or exactly in other regions. It is possible that we have here yet another Continental strain, come presumably via the Thames from the Low Countries. The bowl fragment (Fig. 18, 5) with its inbent rim and linear decoration may be of the West Harling class (cf. Fig. 10, 6). A third century dating for at least part of the material is suggested by the pedestal base (Fig. 18, 9), which must be near the imported form for which such a date is claimed,⁽⁵¹⁾ and by the fairly close derivative (Fig. 18, 10). A later continuation of occupation is, however, indicated by the "saucepan" and bead-rim vessels (*Wisley*, Fig. 2, 1, 15, 17, 29; 3, 1, 34, 39) which suggest connections with Sussex B. One base (Fig. 18, 8) recalls the Wealden footring vessel (see above, p. 57). The contents of the group therefore suggest an origin via the Thames, with contacts in the third century across the Weald into Sussex (unless the pedestals were acquired on the Continent), and also later Sussex contacts.

From a destroyed earthwork at Queen Mary's Hospital, Carshalton, comes another group which includes examples of the regional situlate jar, but, apart from that, bowl and jar forms which are not found elsewhere in the region, nor closely paralleled in other areas (Fig. 19, 1-4). Two sherds of haematite-coated ware were found.

A group associated in a pit at West Clandon, Surrey, also shows Sussex B contacts. It also includes the small omphalos bowl already referred to (p. 63) and has for this reason been dated to the late first century B.C. Some of the other vessels show the continuation of the basic Iron Age A pottery in a degenerate form.

Mr. Ward Perkins has shown⁽⁵²⁾ that pottery with finger-tip ornament is found on both sides of the Thames Estuary and Lower Thames. To what extent the examples north of the Thames belong to the Kent-Surrey group or to the very similar East Anglia group is rather difficult to decide, for the forms appear to be rather degenerate, and might be derived from either, with a slight probability on the side of the southern group. Examples are figured from Danbury (Fig. 20, 2-5) and Great Bromley, Essex (Fig. 20, 1). Finger-printing also occurs on very devolved-looking forms at Jacks Hill, Great Wymondley and Wilbury Camp (Herts).⁽⁵³⁾ A flattened rim and imperceptible shoulder seem to be characteristic of this area or of this period.

Though few of the pot forms in this region can be shown to derive from Wessex, the presence of a little haematite-coated ware shows traces of some contacts with that area. The distribution of this ware has been discussed by Professor Wheeler⁽⁵⁴⁾ and Mr. Frere.⁽⁵⁵⁾ The latter has shown that the Kent examples are in a different technique

(51) Hawkes, "The Caburn Pottery and its Implications," *Sussex Arch. Colls.*, LXXX, Fig. G, p. 225 ff.

(52) Oldbury Report, p. 15, p. 173 and Fig. 8.

(53) The full report on Wilbury, E. S. Applebaum in *Arch. J.*, CVI, appeared too late for proper consideration in this article.

(54) *Maiden Castle*, p. 190.

(55) *Ant. J.*, XXII, p. 129 ff., and XXVII, pp. 45-46.

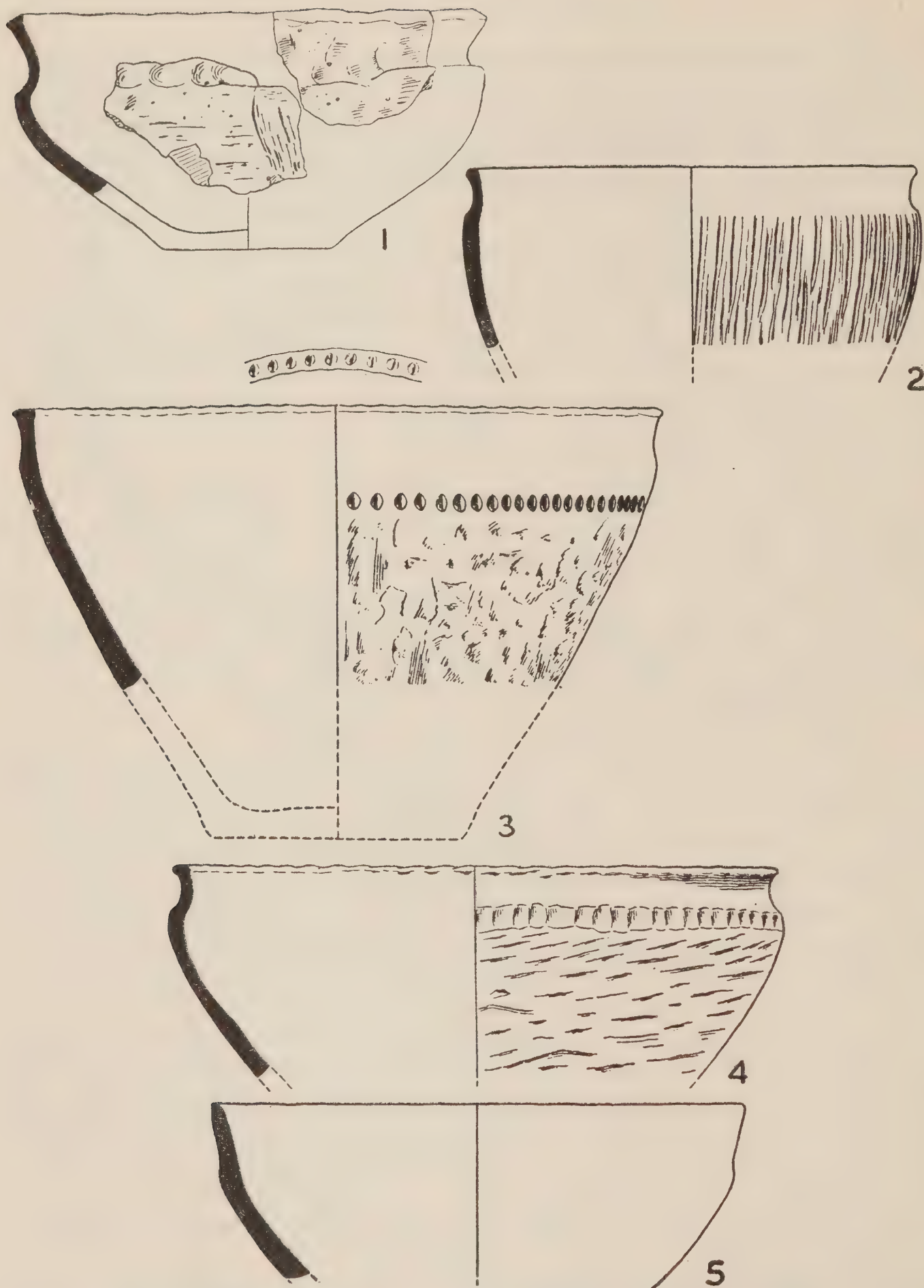


Fig. 20. Lower Thames : *Great Bromley* : 1, *Ant. J.* XVII, p. 194, Fig. 1 ; *Danbury* : 2, *Ant. J.*, XIV, p. 186, Fig. 1, 3 ; 3, *Ant. J.*, XIV, p. 186, Fig. 1, 1 ; 4, *Ant. J.*, XIII, p. 61, Fig. 2 ; 5, *Ant. J.*, XIV, p. 186, Fig. 1, 4.

from the Wessex type, and that the Surrey and Sussex examples are, with one exception, of the Wessex type. At Caesar's Camp and Sandown Park the ware is associated with forms of possible Marnian affinities, suggesting a third century date, which would be in accord with the suggestion at Fengate of a spread of Wessex contacts at that period. On other sites, for instance Epsom, the associations are late, and may show either that the practice became indigenous or else that there were renewed contacts.

To sum up, there is no clear evidence in this region for Iron Age A occupation before the third century B.C., though this must be qualified to the extent that it is not always certain (from the circumstances of many finds) that the Iron Age types are closely associated with the datable third century types from the same site. The cumulative evidence does, however, support this theory, and this is confirmed by good associations on sites like Caesar's Camp, Wimbledon. It is suggested that the group is derived via the Thames from a Low Countries source allied to that from which were drawn the East Anglia groups. That there was an appreciable amount of La Tène influence at an early stage is clear, but it cannot certainly be said whether this influence is that of Marnian groups superimposing themselves on pre-existing Iron Age groups in this country, or whether the combination took place on the Continent, since we have so far no evidence in the region on early Iron Age A groups unaffected by this influence. What is curious is that we also lack, except in the Wealden group, evidence of the permanent adoption and devolution of these specifically Marnian forms.

So far, the evidence for early A occupation in Kent is surprisingly scanty. There must, however, have been an appreciable Iron Age A population, in view of the ultimate A forms found in later groups, for instance at Crayford.⁽⁵⁶⁾

6. THE TRENT BASIN.

Sites.

Leicestershire

Breedon-on-the-Hill.

Harston.

Melton Mowbray.

Market Harborough.

Twyford.

Lincolnshire

Denton

Northamptonshire

Weekley.

The boundaries of this area are difficult to define, since it is only by a process of elimination (owing to lack of close similarities) that one is forced to suggest that arrival by the Trent and its tributaries is the unifying factor for this group. Evidence,

⁽⁵⁶⁾ *P.P.S.*, IV.

in fact, only exists for a number of sites in Leicestershire and one each in Lincolnshire and Northamptonshire, and there are a number of possible routes by which influences might reach Leicestershire. In the first place, on the east, the East Leicestershire uplands form part of the Jurassic zone route, and thus make Wessex influences possible. Secondly, these uplands are penetrated by some of the tributaries of the Wash, Market Harborough in fact lying on the Welland, so contacts with East Anglia are possible. Thirdly, contact with the Upper Thames area by the Northampton-Leicester uplands would be quite possible.

In fact, it will be shown that pottery from the area has characteristics which can be derived from none of these areas. Moreover, some of the sites are situated in East Leicestershire and some in the Charnwood Forest area, two regions separated by the boulder clays of the Soar Valley, and linked only by their common access from the Trent.

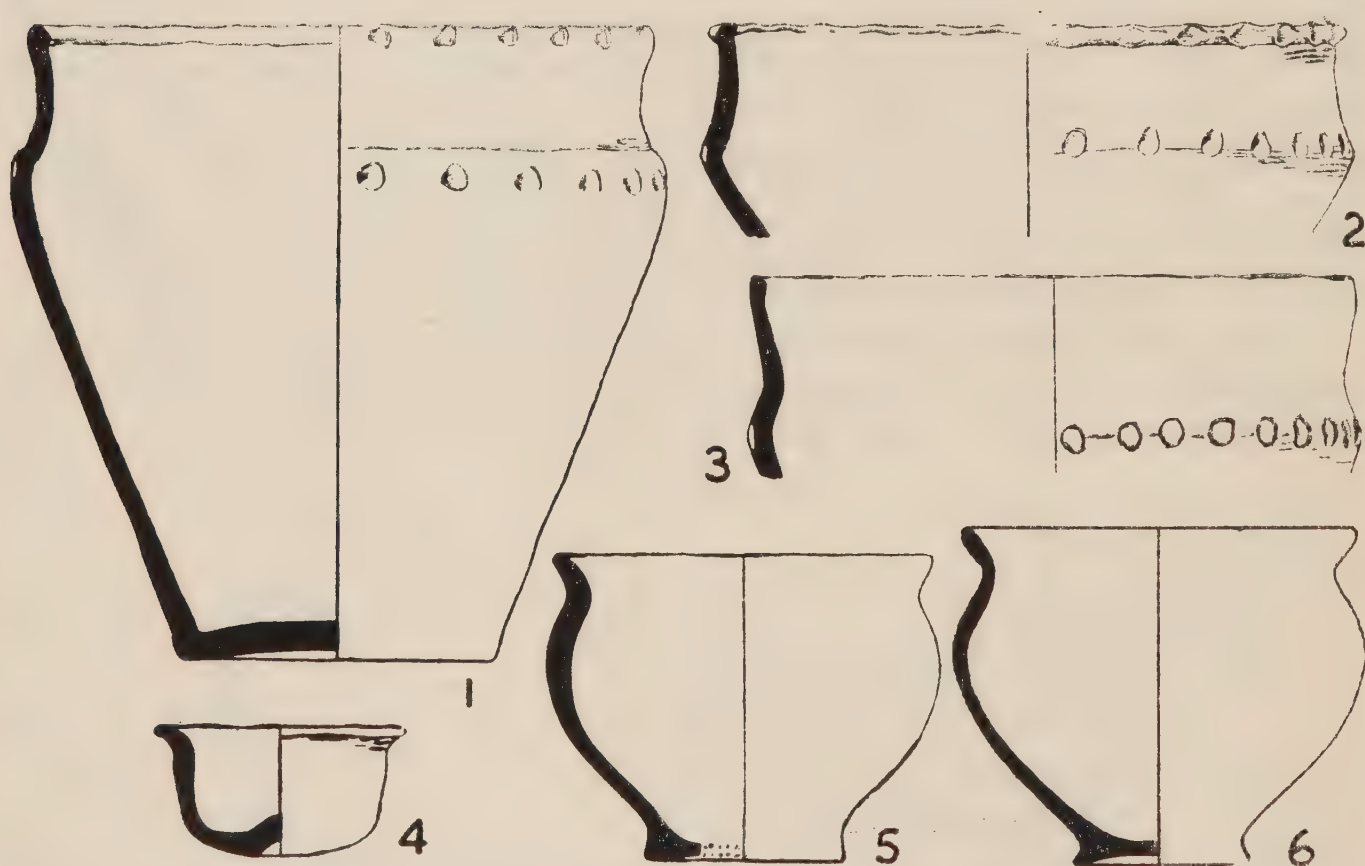


Fig. 21. Lower Thames : *Hulbury* (in *Oldbury*) : 1, Fig. 18, 1 ; 2, Fig. 18, 2 ; 3, Fig. 18, 3 ; 4, Fig. 18, 8 ; 5, Fig. 18, 7. *Oldbury* : 6, Fig. 12, 1.

The inclusion of Lincolnshire in the area is at present suggested by only one site close to the Leicestershire border, a very recent find, but little has yet been done to investigate the Iron Age in Lincolnshire, and in fact all the evidence as regards Leicestershire is the product of the last ten years, mainly the work of Mr. F. Cottrill. Such an inclusion is to be expected both on physiographical grounds, since Lincolnshire is linked to Leicestershire both by the Trent Valley and by the Lincoln Edge continuation

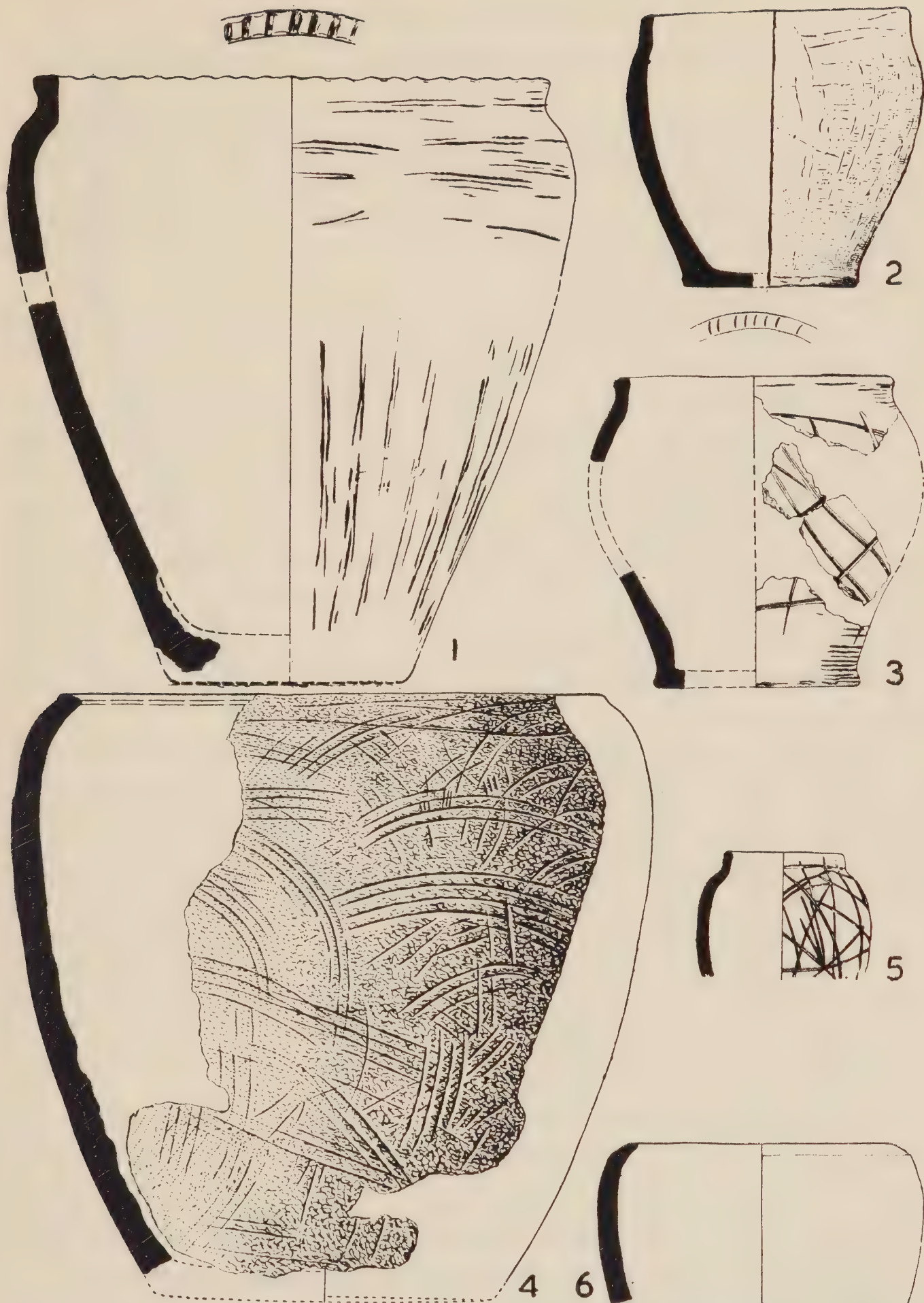


Fig. 22. Trent : Breedon : 1, Fig. 3, 8 ; 2, Fig. 4, 1 ; 3, Fig. 4, 3 ; 4, Fig. 4, 4 ; 5, Fig. 3, 10 ; 6, Fig. 3, 5.

of the Jurassic zone, and from the fact that both areas were included in the territory of the Coritani.

An extension of the area, if it is correct to centre it on connections with the Trent, into the Sherwood Forest region, Derbyshire and East Staffordshire would be quite reasonable, but the evidence for the Iron Age from these areas is almost completely lacking. To judge from the number of hill forts which can be identified on the Ordnance Survey map, it must exist, but it cannot yet be said if it is to be linked with this region.

The especial characteristics of the Trent basin group are the situla form, the splayed base of the majority of the small pots, the absence of bowl forms and the decoration of the majority of the vessels with deep irregular scoring.

The typical situlate jar (Figs. 22, 1 ; 23, 1) has a high, wide shoulder, and a short, approximately upright but rather indeterminate neck. There is often finger-printing or frilling on the top of the rim. The shoulder is in all cases rounded and in many cases the outline is sagging and weak. There is nothing in any of the sites to suggest an early date. The form perhaps approaches nearest to the East Anglian type, especially in the high wide shoulder, but the neck is in general different. The vessels also differ from the East Anglian ones in the complete absence of finger- or nail-printing on the shoulder (compare Figs. 8, 6 ; 9, 1-2 and Figs. 22, 1 ; 23, 1). There are a large number of small situlate pots and also a number of barrel-shaped pots. These are to some extent found in all Iron Age A groups, but are especially common in the East Anglian groups.

Almost all the small pots and some of the large ones are provided with a splayed base, the junction of wall and base curving out into a slight bead. Such bases again can be found on a number of sites (e.g., *Fengate*, Fig. 8, U7-U12 ; *Hunsbury*, Fig. 11, B6 ; *Mount Farm, Dorchester*, Fig. 8, A II 4 ; *Scarborough*,⁽⁵⁷⁾ Fig. 19, 21 d, e, f, j ; *Abington Pigotts*, Pl. I ; *West Harling*, p. 120, Fig. 50), but nowhere are they predominant, as they are at Breedon. It may, however, be noted that all the sites are those for which an East Coast route of arrival is possible. It may be doubted whether this type of base is to be ascribed to derivation from the Marnian-influenced pedestal base, as suggested for the *Fengate* examples, for it seems a long way from a pedestal base, and at present there is no evidence of intermediate stages as there is in the case of the *Wealden* pot. Moreover, the *Scarborough* examples show that the type has a good ultimate Bronze Age ancestry.

It is very noticeable that none of the sites have produced any of the types of fine-ware angular bowls found in the other regions. There are, in fact, no real bowl forms at all, though a few wide-mouthed, coarse pots may have served the same purpose. This is a remarkable difference from the position in other areas. It suggests that contacts with them must be small, and that the origin of the group is to be found in an area which received even less *La Tène* influence than the other groups.

(57) Rowntree, *History of Scarborough*.

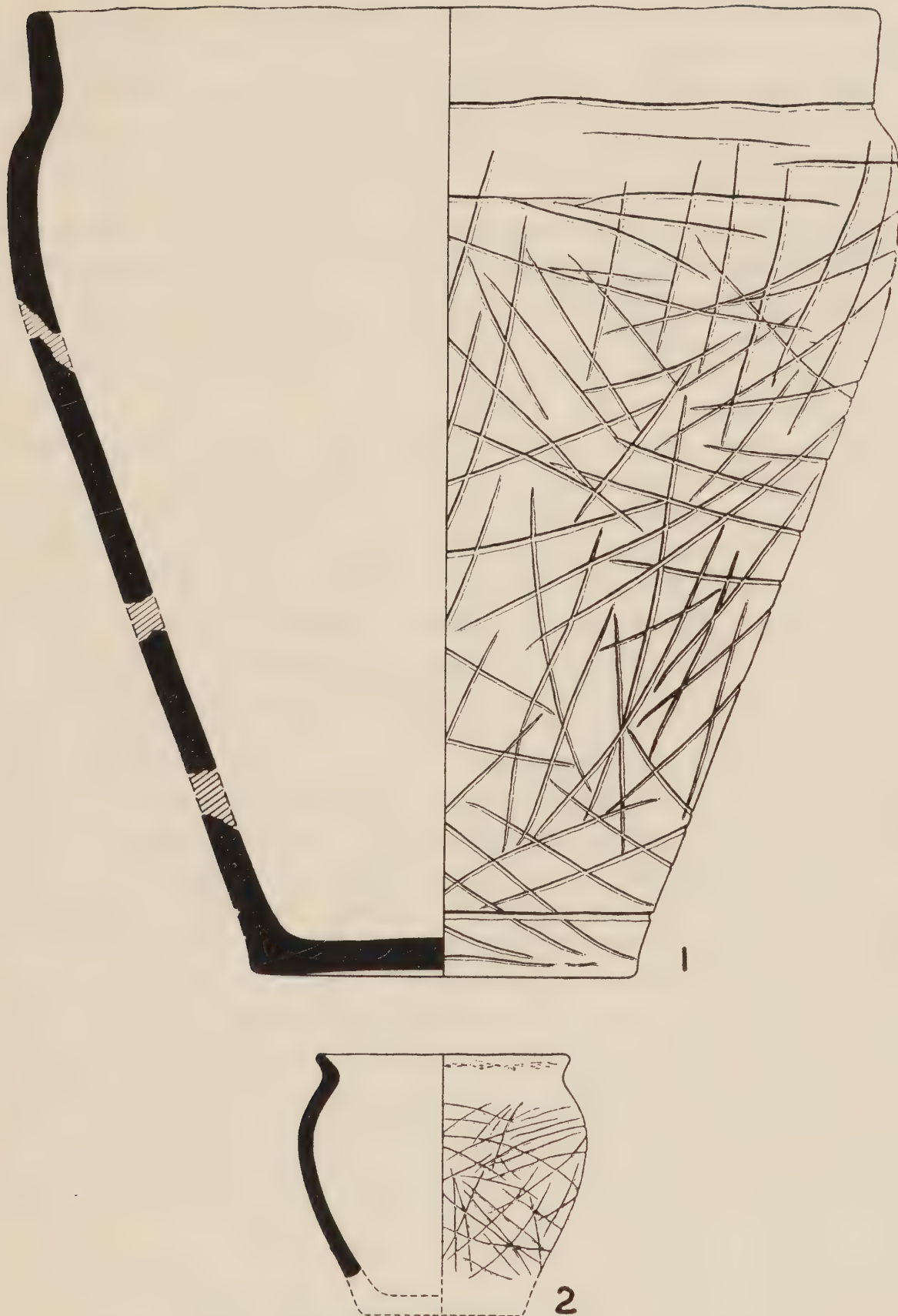


Fig. 23. Trent: *Harston* (in *Breedon*): 1, Fig. 11, 1; 2, Fig. 11, 2.

Finally, the most immediately striking characteristic is the scored decoration. In some cases there is some attempt at zonal arrangement (e.g., *Breedon Report*, Fig. 15, 4,

from Market Harborough) but in the majority it appears to be almost completely haphazard. The scoring is mostly deep and ragged. It is almost invariably applied with a sharp, single-toothed implement, though on Fig. 12 in the *Breedon Report*, from Harston (a particularly degenerate-looking vessel) a four-toothed comb may have been employed. Decoration of large jars by scoring immediately brings to mind the Belgic storage jars of the South-Eastern type, for instance, from Wheathampstead⁽⁵⁸⁾ and Verulamium,⁽⁵⁹⁾ a type which penetrated into Leicestershire in the years immediately preceding the Roman Conquest.⁽⁶⁰⁾ The method of scoring and the form of the vessels is, however, so different that direct derivation is impossible, and the most that can be said is that the few vessels showing zonal arrangement of the decoration may have been influenced by the allied Belgic technique. The connection is, however, too tenuous to base a dating on this alone.

A certain number of examples of similar decoration on Iron Age A vessels can be quoted. At Fengate, Fig. 8 U7 (here Fig. 11, 2) (already cited as having a splayed base) is scored, but the scoring is slighter and the form less devolved than the Leicestershire examples. From Hunsbury there are two examples published, Fig. 7 FT1 and D13 (here Fig. 11, 7-8), but though the forms are not dissimilar, the scoring is again much slighter, and FT1 is decorated with finger-nail impressions, a feature which is not found in the Leicestershire group. At Abington Pigotts, Pl. V A has a few irregular deeply scored lines, and Pl. V H has apparently fairly regular close combing; both sherds are of degenerate Iron Age A form. From a burial at Egginton, Bedfordshire⁽⁶¹⁾ there are two dumpy barrel-shaped pots, and a fragment of another, which are decorated with sparse and irregular scoring. These come from an area, characterised by degenerate and late Iron Age A pottery (which lasts until Belgic influence supervened), lying in the hinterland of the East Anglian and Lower Thames area, which may have been influenced from either. The forms are mostly so degenerate that characteristics cannot be determined when attempting to associate the pottery with one area rather than another.

These examples, picked out from a great mass of material, serve only to emphasize the different character of the Leicestershire-Lincolnshire group. In his discussion of the Egginton pottery, Professor Hawkes has suggested⁽⁶²⁾ that the practice of scoring the surface may be derived from the Marnian tradition. That it existed on the Marne and thence came to Southern Britain is shown by Professor Hawkes in his report on the Worth pottery.⁽⁶³⁾ Here, however, the date suggested on the basis of the Continental

(58) R. E. M. Wheeler, *Verulamium, A Belgic and Two Roman Cities*, pl. LI, etc.

(59) *Ibid.*, Fig. 19, etc.

(60) K. M. Kenyon, *Excavations at the Jewry Wall Site, Leicester*, Fig. 34, etc.

(61) F. G. Gurney and C. F. C. Hawkes, "An Early Iron Age Inhumation-Burial at Egginton, Bedfordshire," *Ant. J.*, XX.

(62) *Op. cit.*, p. 238.

(63) *Ant. J.*, Vol. XX, p. 115 ff., and Fig. 8, p. 117.

evidence is mid third century, which would appear to be considerably too early for the devolved appearance of the Leicestershire group. Moreover, the sparseness of the examples in the intervening area make it much more likely that such a very predominant characteristic is derived by an entirely separate route, for instance the Trent, rather than suddenly emerging after filtering through Southern Britain and the South Midlands with very slight trace.

The devolved form of the Leicestershire pottery has already been emphasized and this gives a general impression of a late date. This is supported by the presence of a few polished sherds (*Breedon Report*, Fig. 4, 2 ; 5, 1, 8) which may be allied to the Oxfordshire AB types (e.g., Allen's Pit, Fig. 10, 22-25), though two of the four Breedon sherds (the only site on which this ware has been found) look more like degenerate A forms and the connection is therefore slight. Stronger evidence of late date is given by the presence, both at Breedon and Harston, of rotary querns of Hunsbury type, so called, not because Hunsbury was necessarily the place of origin, but because a great number of the type was found there.⁽⁶⁴⁾ The general association of rotary querns with B cultures is well established,⁽⁶⁵⁾ as is a date for the earliest arrivals of B groups in Southern Britain of mid first century B.C. Further, at two sites, Loughborough and Denton (Lincolnshire),⁽⁶⁶⁾ with the A pottery (admittedly in the case of Loughborough in forms which seem later than the bulk of the material) is found a Belgic vessel, but as in both cases the finds were not made in the course of archaeological excavations, the association is uncertain.

Thus it appears that the pottery from this group of sites in Leicestershire and Lincolnshire has characteristics which distinguish it from the other groups discussed. The nearest connections are with the East Anglian group, but they are not close, and direct derivation is unlikely. Therefore, the only route by which this culture (emphatically poor and backward) could have arrived is the Trent Valley, which in fact forms, as has been shown (p. 67), the unifying link for the area. The material appears all to be late, probably first century B.C. to first century A.D., and there is so far no evidence for any earlier Iron Age occupation in this region. It thus appears probable that there was at this period a fresh invasion from a very backward region, presumably of the Low Countries, which was forced to penetrate far into the centre of Britain by the existence of well established earlier groups in the more accessible areas.

7. THE WESTERN MIDLANDS

Sites

Shropshire

The Wrekin

Hill fort.

(64) E. C. Curwen, *Antiquity*, XV.

(65) E.g., *Maiden Castle*, p. 322.

(66) Kindly communicated by Mr. J. F. Baker of the Lincoln City Museum.

Montgomeryshire

Fridd Faldwyn	Hill fort.
Breiddin	Hill fort.
Titterstone Clee	Hill fort.
Old Oswestry	Hill fort.

Cheshire

Maiden Castle, Bickerton	Hill fort.
Castle Ditch, Eddisbury	Hill fort.

The area is only combined together by the increasing poverty of the remains, and the fact that absence of investigation in much of it prevents a clearer analysis; it may, in fact, be no true unity. As dealt with here, it extends from Staffordshire and Warwickshire across Shropshire and Cheshire to the Northern Welsh Marches. Much of the area would in prehistoric times have been covered by the forest of the Midland plain, separating the northern upland zone from the western. That Iron Age occupation here was scanty is highly probable. But a study of the hill forts marked on the Ordnance Survey shows that in fact there is a sufficiently continuous line stretching across from Leicestershire into Shropshire to show that communication was not impossible.

In Southern Shropshire and the Welsh Marches the area of very heavy hill-fort building is reached. The origin of the builders of these camps has been discussed by Miss Chitty,⁽⁶⁷⁾ who has suggested that they came up from the south-west by Wye-Lugg-Camlad-Severn valleys, and were groups of Iron Age B people. More recent evidence makes this unlikely.

The dominant characteristic of the whole group is its extreme poverty in surviving equipment. Pottery is almost entirely absent among the finds (completely so on a number of sites) and other material remains very scanty. Structurally, most of the excavated sites show a main fortification period, an interval of decay of the defences, and a hurried refortification. It is usually agreed that this last, which is followed by abandonment, was probably against the Romans. On present evidence it may be suggested that the first stage of fortification on most sites was against the advance of the Severn B people in the first century B.C. (referred to below), rather than against the Belgae, who never in fact got anywhere near this area.

At Fridd Faldwyn there is evidence of a rather more complicated succession. A first Iron Age fortification of palisades was followed, after an interval in which the posts had completely decayed, by a rampart on the same line in the timber-laced technique of the "Vitrified fort" complex, and was in fact vitrified in part. After a sufficient interval for the silting in the ditch of these fortifications to become firm, an enlarged camp was built with multivallate defences. This suggests a date not earlier than

(67) *Arch. Camb.*, 92.

the mid-first century on the Maiden Castle evidence that this type of defence, at least in Wessex, first appears after 56 B.C.⁽⁶⁸⁾ This would agree quite well with the above suggestion that this stage in the fortification was to deal with the threat from the Severn B people. In the final stage, the partly ruined ramparts were hurriedly repaired, it is suggested, in face of the Roman advance.

There is here, therefore, occupation and fortification dating back beyond the mid-first century B.C., of which the second stage is in the timber-laced technique which culminated in the Gallic camps largely built in face of Caesar's advance, and destroyed by him in 56 B.C.⁽⁶⁹⁾ A similar building technique is found at Maiden Castle, Bickerton and Castle Hill, Eddisbury in Cheshire, and Corley Camp in Warwickshire. None of these produced any dating evidence, but they may presumably be associated with the second fortification stage at Fridd Faldwyn. In Britain, the timber-laced rampart technique is northern, and it is possible that the builders reached the West Midlands down the west coast from Scotland and Yorkshire-Lancashire, rather than direct from Gaul.

Fortifications in this technique are however the exception in this area, and clearly the other sites, though they share the final history of the sites with timber-laced ramparts in hurried refortification (e.g., Breidden, Titterstone Clee, the Wrekin), have some different origin. Unfortunately, the Wrekin is the only one to provide a clue, since it is the only one to produce pottery, other than minute, unclassifiable sherds, with the exception of Old Oswestry, which is not yet published. At the Wrekin there was a fair amount of pottery, of coarse Iron Age A type, but only one rim sherd, of degenerate situla type. This is however sufficient to differentiate the site from others lower down the Severn, for instance Bredon Hill, Worcestershire, with their comparatively rich Severn B culture.

The Wrekin therefore suggests that this poverty-stricken area was occupied by an ultimate Iron Age A people, presumably the outcasts driven west before expanding, more progressive, groups, themselves pressed by fresh immigrants from the Continent, or alternatively residual Bronze Age groups acquiring a few elements of Iron Age A culture, including the practice of fortification. Their origin (or that, on the second hypothesis, of the culture they adopted) cannot be guessed at owing to the scarcity of evidence, but might be derived from pressure across the central midlands (suggested by the line of camps across Staffordshire) or the Jurassic zone, where Chastleton⁽⁷⁰⁾ produced a rim as near the Wrekin example as any.

If the suggestion made above, that the first fortifications were against the advance Severn B people, they must have been established early in the first century B.C.

The other principal evidence that the Welsh hill-fort builders were not B groups coming up the Severn is provided by the evidence establishing the existence of the

(68) *Maiden Castle*, pp. 48-51 and 55-57.

(69) Wheeler, *Antiquity*, XIII, "Hill Forts of South-Western Britain and North-Western France."

(70) E. T. Leeds, *Ant. J.*, XI.

Severn B groups. Mrs. Hencken has shown⁽⁷¹⁾ that these people came up the Severn from the south-west about 100 B.C., and were one of the earliest B groups to penetrate Southern Britain. Since then it has been shown that a similar group was established, presumably about the same time, at Sutton Walls, Herefordshire.⁽⁷²⁾ This important site commands the valley of the Lugg, and therefore the route which Miss Chitty suggested was followed by the hill-fort builders. The route for any other B groups was therefore blocked from this time on, and any earlier origin for any B groups in this area is most unlikely. Thus the slight evidence for A connections, the difficulty of any approach from the south-west, and the probability of the hill-fort defences being in the face of the Severn B peoples advance, combine to suggest that the area under consideration was occupied by an ultimate Iron Age A people. The southern boundaries of the area cannot yet be fixed, since there is a gap in sites excavated in North Herefordshire and South Shropshire, but there are a number of inviting sites there which should provide the solution.

Conclusion

In the foregoing sections a case has been made out to show that local characteristics in the forms of Iron Age A pottery in different parts of the country are sufficient to suggest regional cultural groups. The areas of these groups are indicated on the map in Fig. 1, though the boundaries between them, in the main following physical features, are approximate only. All groups clearly derive from a common ancestor, the backward Hallstatt culture of the Continental fringes. In the make-up of the culture, ultimate Bronze Age traditions play a part, greater in some areas than others, influenced in the earlier stages by the culture and crafts of the centre of the Hallstatt world, and in due course by the developing La Tène civilization. In the process of the expansion of the La Tène peoples, the Hallstatt groups of the peripheral areas in the first place acquired elements of the La Tène equipment, and in the second tended to be displaced by the La Tène peoples. Many such displaced groups must have crossed to Britain, and since the process of La Tène expansion was a prolonged one, the migrating groups would have crossed over at different times and would have been influenced to a greater or lesser extent by the La Tène traditions, depending on the date of their migration and the closeness of their Continental homes to the centre of the La Tène world. To these causes are ascribed the differences between the regional groups.

This study is a beginning only. No firm conclusions can be reached until the regional characteristics have been traced to their continental homes. But it was felt worth while to publish it at this stage, in the hope that it would provide a basis upon which British or continental students would join in the prolonged work of examining the material in continental museums which is necessary in order to test the theories here put forward.

(71) *Arch. J.*, XCVI.

(72) *Transactions of the Woolhope Naturalists Field Club*, 1950 (interim report).

It is also recognized that the study of the regional groups is incomplete, in that attention has been devoted in the main to the pottery. Additional evidence could be obtained by a study of the other material equipment and by such evidence as exists as to fortification methods, hut plans and the component features of occupation sites, and a number of other factors. Again it is hoped that the present study will be accepted as a basis for further work.

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Abbreviations

<i>Ant. J.</i>	<i>Antiquaries Journal</i>
<i>Arch.</i>	<i>Archaeologia</i>
<i>Arch. J.</i>	<i>Archaeological Journal</i>
<i>P.P.S.</i> ...	...	<i>Proceedings of the Prehistoric Society</i>
<i>P.P.S.E.A.</i>	<i>Proceedings of the Prehistoric Society of East Anglia</i>
<i>Arch. Camb.</i>	<i>Archaeologia Cambrensis</i>

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